S. HRG. 100-338

MINOT, NORTH DAKOTA; OROVILLE-TONASKET, WASHINGTON; AND SAN LUIS VALLEY PROJECT, COLORADO—WATER RESOURCE LEGISLATION

HEARING

BEFORE THE

SUBCOMMITTEE ON WATER AND POWER

OF THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

ON

S. 641

FOR THE RELIEF OF THE CITY OF MINOT, NORTH DAKOTA

S. 649

TO AMEND THE RECLAMATION AUTHORIZATION ACT OF 1976 (90 STAT. 1324, 1327)

S. 1549

TO INCREASE THE AUTHORIZATION CEILING FOR THE CLOSED BASIN DIVISION, SAN LUIS VALLEY PROJECT, COLORADO

AUGUST 5, 1987

Printed for the use of the
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MINOT, NORTH DAKOTA; OROVILLE-TONASKET, WASHINGTON; AND SAN LUIS VALLEY PROJECT, COLORADO—WATER RESOURCE LEGISLATION

WEDNESDAY, AUGUST 5, 1987

U.S. SENATE,
SUBCOMMITTEE ON WATER AND POWER,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:05 p.m., in room SD-366, Dirksen Senate Office Building, Hon. Bill Bradley presiding.

OPENING STATEMENT OF HON. BILL BRADLEY, A U.S. SENATOR FROM THE STATE OF NEW JERSEY

Senator BRADLEY. The hearing will come to order.

Good afternoon. This hearing before the Subcommittee on Water and Power of the Senate Committee on Energy and Natural Resources is to take testimony regarding three bills.

The first bill, S. 641, would provide for the relief of the city of Minot, North Dakota. S. 641 was introduced by Senator Burdick and is cosponsored by the vice chairman of this subcommittee, Senator Conrad.

The second bill would amend the Reclamation Authorization Act of 1976 to increase the authorization ceiling on the Oroville-Tonasket project in Washington State. S. 649 was introduced by Senator Evans, the ranking member of the subcommittee and is cosponsored by Senator Adams.

The third measure, S. 1549, would increase the authorization ceiling for the Closed Basin Division of the San Luis Valley project in Colorado, and was introduced by Senator Wirth, also a member of the subcommittee, and is cosponsored by Senator Armstrong.

Without objection, a copy of each bill will appear in the hearing record at this time.

[The texts of S. 641, S. 649 and S. 1549 follow:]

100TH CONGRESS
1ST SESSION

S. 641

For the relief of the city of Minot, North Dakota.

IN THE SENATE OF THE UNITED STATES

MARCH 3, 1987

Mr. BURDICK (for himself and Mr. CONRAD) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

---

A BILL

For the relief of the city of Minot, North Dakota.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) notwithstanding any other provisions of law, the city of Minot, North Dakota, is relieved of all liability for repayment to the United States of the sum of $1,026,489.29 associated with the excess capacity of the Minot Pipeline resulting from enactment of the Garrison Diversion Unit Reformulation Act of 1986 (Public Law 99–294).

(b) If the excess capacity referred to in subsection (a) is ever used, the city of Minot, shall reimburse the United States for the costs referred to in subsection (a) proportionate to the actual use of the excess capacity.

○

II

100TH CONGRESS
1ST SESSION

S. 649

To amend the Reclamation Authorization Act of 1976 (90 Stat. 1324, 1327).

IN THE SENATE OF THE UNITED STATES

MARCH 3, 1987

Mr. EVANS (for himself and Mr. ADAMS) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

---

A BILL

To amend the Reclamation Authorization Act of 1976 (90 Stat. 1324, 1327).

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 208 of the Reclamation Authorization Act of 1976 (90 Stat. 1324, 1327) is amended by deleting "$39,370,000 (January 1976 prices)" and inserting in lieu thereof "$88,000,000 (January 1987 prices)".

○

II

100TH CONGRESS
1ST SESSION

S. 1549

To increase the authorization ceiling for the Closed Basin Division, San Luis Valley Project, Colorado.

IN THE SENATE OF THE UNITED STATES

JULY 24 (legislative day, JUNE 23), 1987

Mr. WIRTH (for himself and Mr. ARMSTRONG) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

---

A BILL

To increase the authorization ceiling for the Closed Basin Division, San Luis Valley Project, Colorado.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 109 of the Reclamation Project Authorization Act of 1972 (Public Law 92–514, 86 Stat. 964), as amended by section 6(c) of the Act of October 3, 1980 (Public Law 96–375, 94 Stat. 1505), is further amended by striking out "$57,139,000 (October 1979 prices)" and inserting in lieu thereof: "the sum of $100,000,000 (October 1987 prices)".

○

Senator BRADLEY. Let me welcome to the subcommittee those Members of the Senate and House who have taken the time from their schedules to testify. Your participation is appreciated, and I want to say a particular welcome to Senator Burdick.

I would also like to welcome those out-of-town witnesses who are here today. The fact that you have taken the time and expense to appear before the subcommittee speaks to your strong interest in and concern for the legislation under consideration.

The hearing record will remain open until close of business August 14 for the inclusion of additional written materials.

Senator Burdick, we do not want to detain you any longer. Welcome to the committee, and please offer us any of your thoughts.

STATEMENT OF HON. QUENTIN N. BURDICK, A U.S. SENATOR FROM THE STATE OF NORTH DAKOTA

Senator BURDICK. Thank you, Mr. Chairman. I would first like to say it is a pleasure to be back to my old committee. This is where I was a number of years ago and I made many good friends here.

I would like to thank Chairman Bradley and the other members of the subcommittee for the opportunity to testify today in support of S. 641. I would also like to thank Senator Conrad for his cosponsorship of my bill.

As you know, this bill would relieve the city of Minot, North Dakota of costs attributed to the excess capacity built into the Minot pipeline. Minot Mayor George Christensen and City Council President Ed Kuhn are here today, and they will give a history of Minot's water problems and a detailed account of the events which bring us here today.

So, I will comment on what I see as the role of Congress in this matter.

Under legislation enacted in 1970, Minot was to receive water from the Garrison Diversion Unit by way of the Velva Canal and the Minot pipeline. The city entered into a contract with the Bureau of Reclamation to construct a portion of the Minot pipeline large enough to carry the additional Garrison water. The pipeline was already being built to connect the Sundre aquifer to the city's water treatment plant.

The plan was to divert Garrison water from the Velva Canal into the pipeline near the water treatment plant and supplement water from the aquifer. Thus, half the pipeline was sized at twice the capacity of the other half.

The cost of oversizing that portion of the pipeline had been calculated at more than $1,026,000. To the city this seemed to be a reasonable amount to pay to be assured of a dependable water supply.

As the subcommittee well knows, last year Congress passed the Garrison Diversion Reformulation Act of 1986. The Reformulation Act represented a major compromise between all parties involved in the project. The compromise ended the many years of controversy surrounding Garrison.

What resulted was a drastically changed project. One of the changes in the law was the deauthorization of the Velva Canal, Minot's link to Garrison. Minot was effectively precluded from receiving any benefits from Garrison.

This brings us to the heart of the issue. Should Minot be held responsible for the cost of oversizing the Minot pipeline? I contend that it should not. By deauthorizing the Velva Canal, Congress, so to speak, pulled the rug right out from under the city. Congress recognized there would be situations such as this when the Reformulation Act was passed last year. Therefore we included language in the bill to insure that any project features no longer employed to full capacity under the recommendations of the Garrison Commission final report would be non-reimbursable.

In other words, the cost of features built earlier, which will no longer be used under the reformulation plan, do not have to be reimbursed. The double-sized pipeline at Minot is such a feature.

However, the Bureau of Reclamation holds that the Minot Extension Act of 1970, which authorized the pipeline, was a separate piece of legislation and not specifically a part of the original Garrison Diversion Unit.

Thus, the Bureau feels it technically does not qualify for relief even though the intent of Congress is clear in this situation. The Regional Director of the Bureau wrote to the Minot City Manager on August 22, 1986. In that letter the Bureau agrees that the lack of specific relief for Minot in the Garrison Reformulation was an oversight. S. 641 corrects that oversight.

I would like to have that letter inserted into record at this point.

Senator BRADLEY. Without objection, the letter will be submitted to the record.

[The Bureau of Reclamation letter follows:]

United States Department of the Interior
BUREAU OF RECLAMATION
Missouri Basin Region
P.O. Box 36900
Billings, Montana 59107-6900

IN REPLY
REFER TO: MB-440

AUG 22 1986

Mr. R. A. Schempp
City Manager
Minot Civic Center
Minot, ND 58701

Dear Mr. Schempp:

This responds to your request for cancellation of the incremental costs of the oversized sections of the Minot Pipeline associated with the deauthorized Velva Canal. On the same issue, in his interim response dated June 26, 1986, to Senator Burdick, the Acting Assistant Secretary for Water and Science, Joseph T. Findaro, suggested that the City of Minot's water system may qualify for inclusion under section 5 of the Garrison Diversion Unit Reformulation Act of 1986 as a municipal, rural, and industrial water system. We referred both of these issues to our Field Solicitor for his opinion.

It is the Field Solicitor's opinion that the City of Minot was granted no repayment relief nor assistance for its contractual obligation under the Garrison Diversion Unit Reformulation Act of 1986.

The Garrison Diversion Unit (GDU) and the Minot Extension are authorized by separate Acts of Congress. The Reformulation Act specifically amends the GDU authorization of 1965, but does not amend the Minot Extension Authorization of 1970.

The lack of mention of the Minot Extension in the Reformulation Act, the Legislative History of the Reformulation Act, the Garrison Diversion Unit Commission Final Report, or the Bureau's supporting documents leads to the conclusion that there is no relief from the existing repayment contract for the City of Minot in the Reformulation Act. However, those same documents imply an intent on all parts that unused capacity of existing features should be nonreimbursable. That the Minot Extension was not included appears to be an oversight.

It is the Field Solicitor's further opinion that the existing Minot facilities are not eligible for Federal funding under section 5 of the Reformulation Act. However, new features, pursuant to the Garrison Diversion Unit Commission Final Report, will qualify.

Based on this opinion, additional legislation would be required to provide relief to the City from repayment of that portion ($707,130.00) attributed to the increased pipeline capacity required to supply GDU water to Minot from the Velva Canal. Such legislation, if initiated, should provide that

if the excess capacity is ever used by the City of Minot, then all costs attributed to the excess capacity shall become reimbursable, proportionate to the actual use. Absent passage of such legislation, we must continue to charge the City under the terms of the existing contract.

If we can provide further assistance, please contact Mr. Kent Heidt, Chief, Repayments Branch, Bureau of Reclamation, Billings, Montana, on (406) 657-6413.

Sincerely yours,

B. E. Martin

B. E. Martin
Regional Director

Senator BURDICK. S. 641 would relieve the city's reimbursable cost by the amount of $1,026,489, the cost of the excess capacity built into the pipeline. The fact is, Minot should not be forced to pay for Congress' mistake.

I am confident that once the subcommittee hears from the other witnesses here today and considers the relevant facts, it will agree that Minot has not been treated fairly.

Thank you very much.

We have with us today the Mayor of the City of Minot, and we also have a member of the Council. And I am sure that the information they will give you will be of great value to you.

And I might say, Mr. Chairman, that I have another meeting waiting for me. And if I may be excused at this time, I would appreciate it, after you have had questions.

Senator BRADLEY. Are there any questions, Senator Conrad?

Senator CONRAD. I just want to thank Senator Burdick for sponsoring this legislation that will be of benefit to Minot. I think he has made an excellent case for the passage of this legislation. We will not detain him any further with questions, at least from me.

Senator BRADLEY. Senator Wirth?

Senator WIRTH. No questions.

Senator BRADLEY. Senator Evans?

Senator EVANS. No questions.

Senator BRADLEY. Senator Burdick, thank you very much for testifying. It is always very important to have the senior Senator sponsoring a piece of legislation that affects his State. Thank you very much.

Senator BURDICK. I want you to listen very carefully to the witnesses who follow me because they will have some important information.

Senator WIRTH. Mr. Chairman, while the next witnesses are coming up, may I at this point insert in the record a statement by the junior Senator from Colorado and by Congressman Campbell on the closed basin project of the San Luis Valley of Colorado which has been added to the agenda for today?

Senator BRADLEY. Without objection. We had Senator Armstrong as the next witness. The statement by the junior Senator from Colorado will be submitted, as well as the Congressman's statement.

Senator WIRTH. Thank you, Mr. Chairman.

[The prepared statements of Senator Wirth and Mr. Campbell follow:]

STATEMENT OF THE

HONORABLE TIMOTHY E. WIRTH

Mr. Chairman, I want to thank you, and your staff, for agreeing to add to the agenda for this afternoon's hearing the bill that Senator Armstrong and I introduced, to raise the authorization ceiling for the Closed Basin Project in the San Luis Valley of Colorado.

Water is a precious resource in semi-arid states like Colorado, and that is certainly true in the Rio Grande drainage in south-central Colorado. The annual flow of the Rio Grande is subject to an interstate compact among the states of Colorado, New Mexico, and Texas. In addition, the United States has a commitment, embodied in a treaty, to share the water of the Rio Grande with the United States of Mexico.

In many years, Mr. Chairman, there just is not enough water to go around. As a result, Colorado water users often have to curtail their diversions in order to meet the requirements of the interstate compact and international agreements. The Closed Basin Project will help solve these water resource problems. By salvaging ground water that would otherwise be lost to evaporation and plant transpiration, and by delivering that water to the Rio Grande, this Project will assist Colorado in meeting its legal

obligations without requiring that Colorado farmers and businesses cease diversions during the crucial summer months. The final components of this Project are also needed to increase the water supply for several very productive wildlife refuges in the Rio Grande Basin.

This Project is more than 60 per cent complete, Mr. Chairman. However, the design of many components has changed since the Bureau originally began construction, and some cost estimates made years ago simply are no longer accurate. As a result, it is now necessary to increase the authorization ceiling to $100,000,000. It is my understanding that the Administration supports an increase in the Project's authorization ceiling, and that the House Interior Committee is working on a bill that is very similar to the bill that Senator Armstrong and I introduced.

There is no controversy in Colorado over this Project, Mr. Chairman. Indeed, there is a consensus that this is an important and much needed Project. I appreciate your help in scheduling this hearing today, and I hope that the Committee can take this bill up at the earliest possible time. Again, I appreciate your help.

Finally, Mr. Chairman, Congressman Campbell had hoped to be here this afternoon to offer his support for this legislation. However, I understand that he will not be able to be here this afternoon because of the House Interior Committee's schedule. Therefore, I ask unanimous consent that Congressman Campbell's written statement be included in the record.

OPENING STATEMENT
THE HONORABLE BEN NIGHTHORSE CAMPBELL
INCREASING THE CEILING ON THE CLOSED BASIN PROJECT
BEFORE THE SENATE ENERGY COMMITTEE
JULY 26, 1987

The measure before the committee amends the Reclamation Project Authorization Act of 1972 by raising the authorization ceiling on the Closed Basin Project in the San Luis Valley of Colorado by $24.8 million. This will bring the cost of the project up to a total of $100,000,000, according the Bureau of Reclamation.

Bureau officials in the Amarillo regional office advised me that incorrect estimates during the Phase 3 construction make this additional request necessary, as well as the increased costs of keeping the project office open longer than originally anticipated because of project delays.

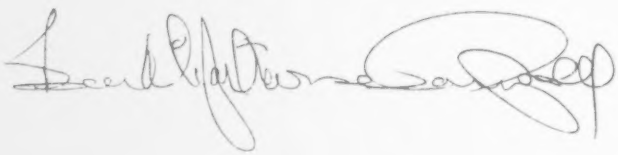
The Administration has advocated this ceiling increase because it understands the necessity of the ceiling increase to complete the project. The additional money will be used, in part, to line a conveyance channel, build additional wells to fulfill Project requirements, and to pay increased land aquisition costs.

The construction of the project is nearly complete and water has begun to be delivered to the National Wildlife Refuges near Alamosa, Colorado from the first two stages of the Project. Without the authorization increase the project cannot be completed, the recreational features important ot the San Luis Valley will not finished, and the wells in the

last stages will not be hooked up and available for project production.

In addition to meeting the future water needs of the Valley, the Project allows Colorado to fulfill its obligations to the states of New Mexico and Texas without significantly diverting water from Colorado water users. The Project also fulfills a U.S. treaty committment with Mexico which shares the water from the Rio Grande River.

I hope the committee will support this measure to help ensure that the long term water needs of Colorado, New Mexico, and Texas are met.



Senator BRADLEY. Is Senator Armstrong here? All right, he is not here.

Is Senator Adams here?

The next witness is the Honorable Byron Dorgan, United States Representative. Congressman Dorgan, welcome to the subcommittee.

STATEMENT OF HON. BYRON L. DORGAN, A U.S. REPRESENTATIVE FROM THE STATE OF NORTH DAKOTA

Mr. DORGAN. Thank you very much, Senator. I appreciate your willingness to hold these hearings. Let me begin by saying that the piece of legislation that you are holding a hearing on today, S. 641, has a companion bill introduced by myself in the House of Representatives, H.R. 3099. And Senator Burdick I think ably described the rationale for these two pieces of legislation, why it is important for us to move ahead and enact both pieces of legislation. And there are representatives of the City of Minot who will appear before you today to describe from their firsthand perspective why this is very important to their community.

But Senator Bradley and other members of the subcommittee, let me describe to you as someone who sat in a room about this size over on the Rayburn side a couple of years ago and helped write the Reformulation Act that originated in the House, came out of the House, and finally made it through Congress, was signed by the President. When we wrote that piece of legislation and moved it through George Miller's subcommittee and on to the full committee, we understood that when we put that piece of legislation together, reformulating that project would mean that some features might have been overbuilt, that some financial adjustments would have to be made, and that the intent of that legislation was to accommodate that along the way.

This is precisely what is embodied in these two pieces of legislation. It is clear that Minot expended money to produce a pipeline that is now in excess capacity because they believed, when they made the commitment, that the Garrison Diversion project would be built in a way that would deliver certain quantities of water to their community.

Because of the reformulation, that project will not be built in that same way and, therefore, that quantity of water will not be delivered to that community. Therefore, the community is stuck with an investment for which there is going to be no water moving through that excess capacity in the pipeline.

They say, quite properly, wait a second. This is something then we ought to have a financial adjustment for. If there is no adjustment, our community gets stuck because the Federal Government changed its promise after the fact. And that is precisely the case. That is exactly why Congress must pass these pieces of legislation.

Now, in my judgment the intent of what we did in the Reformulation Act was to accommodate the Bureau making the decision on its own. I think there is plenty of room for them to have made this decision by themselves. I mean, I think that was the intent of Congress. And you can read this Reformulation Act as including that intent. They have chosen not to do that. Therefore, we have to

come by and through these pieces of legislation provide a remedy for the people in the community of Minot.

If we do not provide that remedy, what we in effect say to the citizens of Minot is you are going to pay for something that you are never going to get because the Federal Government changed its mind. Now, that is fundamentally wrong.

So, that is why the Mayor, George Christensen, is here, the City Councilman, Ed Kuhn, the President of the City Council, and City Manager, Bob Schempp, who you will hear from very soon. And they will tell you, I'm sure, the same thing in even more vivid terms from the perspective of the citizens of the community of Minot.

We do not want anyone from your state or mine to have to pay for something they are never going to get because the Federal Government made a promise and then decided midterm not to keep it. The Reformulation Act ought to provide an escape clause, and I believe does, but if it is not clear enough to the Bureau, then we ought to provide that escape clause through this legislation to say to the people of the community of Minot that you are not obligated for something that you are never going to get. And that is precisely the purpose of this legislation.

I want to thank you, Senator Bradley, and thank the other members of the panel for holding this hearing, and hope that you will move with dispatch, and promise you I will work just as hard in the House of Representatives to do the same so that we can do what we should do for the people of North Dakota in the community of Minot.

Senator BRADLEY. Thank you very much, Congressman, for your testimony.

Senator Conrad?

Senator CONRAD. I too want to thank the Congressman. I think he has explained very well precisely the dilemma that the community of Minot faces. And I do not think there is a need for further questioning.

Senator BRADLEY. Senator Evans?

Senator EVANS. No questions.

Mr. DORGAN. Mr. Bradley, may I make one final point? I did not stress it during the testimony, but it is important to talk about the retroactivity. We are talking here about the relieving of the city of $1,026,489 plus interest on the unpaid balance, which represents the loan reduction retroactive to January 1, 1978. That is a very important principle and I hope that you will consider that. I know that will be amplified upon by the community of Minot.

Senator BRADLEY. Thank you very much, Congressman. We will look forward to hearing the testimony of the officials from Minot. It does appear that the city was a victim of a congressional \ him. So, we look forward to hearing their testimony. Thank you very much for your contribution today.

Our next witness is the Honorable Sid Morrison. Is he here? Yes, he is.

STATEMENT OF HON. SID MORRISON, A U.S. REPRESENTATIVE FROM THE STATE OF WASHINGTON

Mr. MORRISON. Thank you, Mr. Chairman.

Senator BRADLEY. Welcome to the committee.

Mr. MORRISON. I appreciate your holding this hearing.

Mr. Chairman and members, I am here to testify in support of Senate Bill 649, Mr. Chairman, as you mentioned, cosponsored by our two very able Senators from the great State of Washington. This relates to the raising of the authorization ceiling for a rehabilitation project in my district called the Oroville-Tonasket Irrigation District. We call it the O and T. It is up near the Canadian border and is a magnificently beautiful area. And I would encourage you all to visit. We are pleased that the Office of Management and Budget has approved this increase in the authorization ceiling, and we now ask for your help.

This project was started a number of years ago to replace an old 70 year old gravity system with a rather unique flume built along some of the foothills of the Cascade Mountains. And it is being replaced with a state-of-the-art pressurized system.

As a former farmer involved in irrigation, I can tell you pressurized systems are marvelous when they work. In this case some design problems—I don't know that it is any one particular person's fault, but they failed to deal with something Senator Evans knows very well, and it is called glacial flour. And in the northwest, as the water flows underneath the glaciers, it brings with it a very fine powdered material that will eat the heart out of pumps, out of filters, out of sprinklers and all the things that are parts of a pressurized system.

There has been a tremendous amount of frustration among my constituents, the water users in this O and T district, because the design which was done again did not take into consideration some local circumstances.

I am pleased Commissioner Duvall is here with us today and John Keys, our Regional Director of the Bureau of Reclamation. They have promised that they will find both the short-term and long-term solution to this. They did this a year or so ago, and they have been very true to their word. They have sent in a new management team. And I think we have the answer in hand, but we need this increase in authorization ceilings.

It is my understanding that the money they have will last till the end of this fiscal year, but that is right around the corner. And I would urge the committee to act. We plan to act in the House as well, and have had some committee consideration already of a similar measure which I have sponsored on that side of this building.

Senator BRADLEY. Thank you very much, Congressman Morrison.

Mr. MORRISON. Thank you.

Senator BRADLEY. Senator Conrad, any questions?

Senator CONRAD. No.

Senator BRADLEY. Senator Evans?

Senator EVANS. Thank you, Mr. Chairman. I guess not a question so much as a comment. My colleague from the State of Washington and from the district which has this project in it—this is a career-long effort practically. You have to serve in Congress a long time

to handle some of these problems. It was a project first authorized in 1976 when I was still governor of the State of Washington. And it hasn't worked yet. And I think that it is time that we do the necessary authorization.

I'll have other questions of the Bureau of Reclamation to make sure that what they are suggesting now does work, and that we move along with it. I think it is long, long overdue.

Mr. MORRISON. Senator, you can imagine the frustration of the people who are living there, working under this transition. You know, you have gone from governor, to president of a college, now to a U.S. Senator. They have gone through some interesting gyrations themselves, and would like to see this project completed satisfactorily.

Senator EVANS. I suspect that they have gone from financially healthy, to marginal, to maybe not being able to make it if they cannot depend on their water.

Mr. MORRISON. There is always hope as long as there is snow in the hills. That is their theme.

Senator BRADLEY. Some of them probably wish they still had the flumes.

Mr. MORRISON. I have heard that on numerous occasions.

Senator EVANS. It would probably deliver water better than the project as so far.

Senator BRADLEY. Thank you very much, Congressman.

Our next witness is Senator Brock Adams, our distinguished Senator from Washington. Welcome to the committee.

STATEMENT OF HON. BROCK ADAMS, A U.S. SENATOR FROM THE STATE OF WASHINGTON

Senator ADAMS. Thank you, Mr. Chairman. I appreciate the opportunity to appear here today before you and Senator Evans and Senator Conrad. And I would ask unanimous consent, Mr. Chairman, if my statement might appear in full in the record.

Senator BRADLEY. Without objection, your statement will be in the record in full.

Senator ADAMS. I want to thank the Chairman and the members of the committee for the opportunity to speak in support of this legislation. And I am very pleased, Mr. Chairman, that you will be hearing testimony today on the Oroville-Tonasket Irrigation District.

This, as Senator Evans indicated in his opening remarks, has been a long and difficult project for the people that are in this area. And I know that you will hear representatives from the district, Mr. Leland and Mr. Price. And I am sure the committee will benefit from their testimony. All of us at one time or another have visited this site, and we know of the sand that has accumulated and the problems that have developed there.

And I am so very happy that the senior Senator from my state, Senator Evans, is on this committee and he is a fellow cosponsor of this legislation with myself. And of course, on the House side Representative Morrison and others have supported this.

It has all had complete support from the district, as well as the state, because it raises the authorization ceiling, Mr. Chairman,

and gives an opportunity for this project to be constructed by the Bureau and to fix some of the problems incurred and encountered in the earlier phases.

As the committee will hear today, this project—to rehabilitate it is to take care of a deteriorating system. And it has not been trouble-free, and we are not trying to represent that to the committee. There have been some design failures. And I know the committee will look into those carefully as they go along.

But the problem is that if we don't do this, we are going to be left with a system that does not work. And fortunately, the irrigation district and the Bureau of Reclamation have worked together. And it is my understanding now that the final product is acceptable to the district. It certainly is acceptable to all of us, Mr. Chairman. And we just hope that with this acceptable plan having been delivered that the Federal Government can meet its obligation and the local people their obligation so that we will have swift and favorable consideration.

And I look forward to looking at the project again this summer and to working with the committee. And Mr. Chairman, if now or at any later time there are any questions that you would like to ask me or my staff, we are certainly available to you.

[The prepared statement of Senator Adams follows:]

August 5, 1987
Senate Energy Committee

STATEMENT BY SENATOR ADAMS ON OROVILLE TONASKET LEGISLATION

Mr. Chairman, I would first like to thank this committee for the opportunity to appear here today, and speak on behalf of this legislation.

I am very pleased as well to see that the committee will be hearing testimony from representatives of the Oroville-Tonasket Irrigation District, Mr. Leland Robinson and Mr. Richard Price. I am sure the committee wil benefit from their testimony.

Finally, I am happy to see here today my distinguished fellow colleague from Washington, and fellow co-sponsor of this legislation, Senator Evans.

This bill raises the authorization ceiling on the Oroville-Tonasket project being constructed by the Bureau of Reclamation. This increase is needed in order to finish this project, and to fix problems encountered in earlier phases.

As the Committee will hear today, this project, which rehabilitates the Oroville-Tonasket Irrigation District's deteriorating irrigation system, has not been trouble free. Design failures have

resulted in damage to irrigator's systems, and there have been concerns that once the project is completed the irrigation district will be left with a system that doesn't work. Fortunately, the irrigation district and the Bureau of Reclamation have worked together in the last few months to develop solutions to the problems encountered, and it is my understanding that the final product will be acceptable to the district. I applaud both the district and the Bureau for their cooperation in reaching this agreement.

Mr Chairman, this project is almost finished. An acceptable plan for

completion has been developed, and the Bureau has money ready and waiting. Without passage of this legislation, the significant federal resources already committed will be wasted. Furthermore, the farmers of the Oroville-Tonasket Irrigation District, who have persevered throughout the history of this project, would end up in a worse situation than where they started. The federal government has an obligation to these people to successfully finish this project, and this legislation is consistent with that obligation.

I urge this Committee to give this bill swift and favorable consideration, and look forward to working with the Committee to meet that goal. Thank you.

Senator BRADLEY. Senator Adams, thank you very much for your testimony.

Senator Conrad?

Senator Evans?

Senator EVANS. I think Senator Adams has stated the case very well. All we need is action.

Senator BRADLEY. Thank you so much.

Senator ADAMS. Thank you very much.

Senator BRADLEY. Our next witness is the Honorable C. Dale Duvall, Commissioner of the Bureau of Reclamation. Welcome to the subcommittee, Commissioner.

Mr. DUVALL. Thank you.

Senator BRADLEY. And you will be accompanied by Mr. John Keys, the Regional Director, Pacific Northwest Region of the Bureau of Reclamation.

Mr. Duvall, why don't you begin? Try to limit your testimony to a reasonable length to be determined by the Chairman.

STATEMENT OF C. DALE DUVALL, COMMISSIONER, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR, ACCOMPANIED BY JOHN KEYS, REGIONAL DIRECTOR, PACIFIC NORTHWEST REGION

Mr. DUVALL. Hopefully my brevity will be pleasing to the Chairman.

I presume that you would prefer that we start with the Oroville-Tonasket project, Senate Bill 649. I am here today to bring word that the administration supports S. 649.

I think that the witnesses who have appeared before me have pointed out the need for the increase in authorization. We presently have a ceiling of something over $39 million in 1976 dollars, and we are asking that the ceiling be raised to $88 million in January 1987 dollars. I think the other people have indicated the purpose for the increase and have alluded to the faults that we have found in the design and operation of the project.

Being a native of the State of Washington myself and having every intention of going back to live there one day, I have made a personal pledge to the people in the Oroville-Tonasket area that I will ride this thing through and see that the project is corrected and am looking forward to having the ceiling increase in order to facilitate that pledge.

I presume that my statement will be placed in the record.

Senator BRADLEY. Your statement will be placed in the record in full.

Mr. DUVALL. Thank you.

[The prepared statement of Mr. Duvall on S. 649 follows:]

Statement of C. Dale Duvall, Commissioner, Bureau of Reclamation, Department of the Interior, before the Senate Subcommittee on Water and Power, Committee on Energy and Natural Resources on S.649, a bill to raise the appropriation ceiling for the Oroville-Tonasket Unit, Chief Joseph Dam Project, Washington

August 5, 1987

Mr. Chairman, I am pleased to appear before your committee today to testify in support of S.649.

The Reclamation Authorizations Act of 1976 (Public Law 94-423; dated September 28, 1976) authorized the Secretary of the Interior to construct, operate, and maintain the Oroville-Tonasket Unit, Chief Joseph Dam Project, Washington. The unit is located in north-central Washington between the towns of Oroville and Tonasket along the Okanogan River in Okanogan County. It is designed to serve the functions of irrigation and fishery enhancement.

Construction of the Oroville-Tonasket Unit began in 1980 with the award of the first contract for a siphon across the Similkameen River, a tributary of the Okanogan River. Water presently is being delivered to approximately 5,700 acres by five pump distribution systems. The final distribution system will be completed this summer and water delivery to all 10,000 acres is scheduled for the 1988 irrigation season. Expansion of an existing fish hatchery has been completed for steelhead production to enhance the fishery and we are in the second year of fishery production. Reclamation's responsibility for steelhead production and stocking is for a 5-year development period only.

A major problem has developed on the five distribution systems that pump directly from the Okanogan River. The pumps draw large quantities of silt and sediment into the pipe systems that has resulted in damage to the irrigators' on-farm systems and accelerated wear on all components of the distribution system. To resolve that problem, settling basins are proposed to be constructed at the river pumping plants.

The estimated cost of the Oroville-Tonasket Unit, based on the authorized project plan, has increased from $39,370,000 (January 1976 price level) to $88,000,000 (January 1987 price level). Fiscal year 1987 appropriations for the Unit are within the current indexed appropriation ceiling and are adequate to fund the work planned for this fiscal year.

The increase in the appropriation ceiling is necessary to: (1) construct modifications to the river pumping plant systems to minimize the sediment and silt problem; (2) modify existing contracts for additional work associated with change orders and claim settlements; (3) complete wildife mitigation features; (4) cover additional expenses associated with the steelhead fishery enhancement program; (5) construct drainage facilities; (6) remove a portion of the old irrigation system for safety purposes; and, (7) construct salmon fishery facilities and related salmon fishery enhancement activities.

The plan of development for the Oroville-Tonasket Unit as outlined in the May 1975 feasibility report was the basis for the authorized project plan. Under that plan, the original existing gravity irrigation system within the Oroville-Tonasket Irrigation District will be replaced. In its place, a full pressure water supply system capable of irrigating 10,000 acres is being constructed which includes six pumping plants to lift water into pipe distribution systems and provide the necessary pressure. While the authorized project plan provides for the installation of certain minor drainage facilities, this work will be deferred until the need arises.

Certain minor changes have been made in the authorized plan. The Osoyoos pumping plant location has been relocated from the river to Osoyoos Lake. Other minor changes were made in pipeline locations as designs were refined. Construction of settling basins are necessary to correct the sediment problem that developed in completed sections of the distribution system.

Under the authorized project plan, steelhead fishery enhancement and salmon fishery enhancement will be achieved. However, the Fish and Wildlife Service has stressed that there are continuing uncertainties as to what the salmon enhancement facilities should be. Alternatives to the authorized plan were included in a fish passage feasibility study, funded by the Bonneville Power Administration, which currently is being evaluated by the Northwest Power Planning Council. Concerns expressed by Canada and the State of Washington over the possible introduction of a particular infectious disease by stocking of salmon and trout above Enloe Dam will be fully considered when choosing the appropriate alternative.

Additionally, we understand that the State of Washington would prefer to resolve problems related to salmon restoration in the lower Similkameen River before instituting hatchery production to plant salmon in the upper river. Although little progress has been made in resolving the uncertainties about the salmon enhancement aspects of the project, the Fish and Wildlife Service and Reclamation are seeking a resolution of that issue. Depending on the extent to which the final salmon enhancement facilities vary from the authorized plan, future revisions for salmon enhancement facilities may be necessary.

Enactment of S.649 would permit completion of the Oroville-Tonasket Unit according to the currently authorized project plan. Any monies appropriated under an increased appropriation ceiling would be subject to repayment as currently provided by Public Law 94-423.

Mr. Chairman, this completes my statement. I would be happy to answer any questions you may have.

Senator BRADLEY. Senator Conrad?

Senator CONRAD. No questions.

Senator BRADLEY. Senator Evans?

Senator EVANS. Mr. Chairman, I ask unanimous consent that an opening statement of mine be placed in the record in full.

Senator BRADLEY. Your statement will be placed in the record in full.

[The prepared statement of Senator Evans follows:]

STATEMENT OF SENATOR DANIEL J. EVANS
AT THE SENATE ENERGY COMMITTEE HEARING ON S. 649
A BILL TO RAISE THE AUTHORIZATION CEILING LEVEL ON THE OROVILLE-TONASKET IRRIGATION PROJECT
AUGUST 5, 1987

Mr. Chairman: this hearing today is an important step in what I hope will be a speedy resolution of a problem that has plagued the farmers in the Oroville-Tonasket Irrigation District for too long -- getting clean water from their irrigation system. This hearing is on a bill I sponsored, along with Senator Adams, and is identical to a bill that was sponsored by Congressman Morrison in the House of Representatives. S. 649 will raise the authorization level on the Oroville-Tonasket irrigation project to $88 million in order to complete construction and deliver clean water to farmers in the District.

The Oroville-Tonasket irrigation project was authorized by Congress in 1976 to replace an antiquated delivery system with a pressurized delivery system to benefit growers in North Central Washington. At that time, the authorization ceiling was authorized at $39.4 million in January 1976 prices. In today's dollars, that translates to an authorization ceiling of $70.8 million. The Bureau now estimates that it will need $88 million to complete the project. This amount includes both the costs to complete the third phase of the project and to repair problems that have plagued the construction of the second phase of the project.

Due to problems relating to both insufficient analysis, inadequate design, and faulty materials in the second phase of

construction, farmers have been struggling with a new system, that often delivers more silt than water. The irrigators dependent on the water delivery system have experienced heavy damage to sprinklers and regulators. In some cases, irrigators have not been able to use the system at all. Initial attempts to try to repair the system to make it work proved futile and frustrating.

Fortunately for the growers in the Oroville-Tonasket Irrigation District, the Bureau has finally admitted "it can't get there from here." It has scrapped its original attempt to fix the siltation problem and has agreed to construct siltation ponds at five pumping plants along the Okanogan River. Water will remain in the settling ponds for a few hours and then screened to remove as much silt and other material from the water before it enters the grower's distribution systems. After many long months of discussing the issue, there is finally some agreement on how to proceed. In order to proceed, however, we need this bill.

I support this legislation as it is crucial to the farmers dependent on that irrigation system to have the rehabilitation project completed. I must take this opportunity, however, to express my strong concerns about the practices and policies of the Bureau of Reclamation that seem to continually result in cost overruns and extended delays in completing projects. Our farmers are dependent upon the federal government fulfilling the commitments made to them when Congress authorizes water projects. These farmers should not be subject to the endless delays and broken promises that so frequently accompany Bureau projects.

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Senator EVANS. Let me just take a few minutes to find out just where we are on this. It is my understanding that the Bureau is—or the administration has now agreed to this increase in authorization which in the view of the administration will be sufficient to finish the project and finish it satisfactorily.

Mr. DUVALL. That's correct.

Senator EVANS. What is the timing in terms of finishing the project and testing it and having it ready to deliver adequate water to the farmers?

Mr. DUVALL. It is my understanding that the project can be finished in Fiscal Year 1989. However, that still leaves some funds in the authorization ceiling that would be held in reserve in the event some drainage facilities may be determined as needed in future years. The drainage is, of course, not built until there is an indication of need.

Senator EVANS. And that means that there will not be sufficient water then—we are about through the irrigation year this year, or at least close to it. There will not be any improvement next year.

Mr. KEYS. That's correct.

Senator EVANS. Will there be any improvement the year after or how early in Fiscal Year 1989 do you expect to have better water delivered?

Mr. KEYS. The repairs that will be accomplished on the Oroville-Tonasket will be in two phases. The first phase will be repairs on the Bonaparte system for two reasons. One, it is the one that has the worst problems. And number two, we will use that——

Senator EVANS. Could you identify the Bonaparte system for the record?

Mr. KEYS. Yes. The construction of Oroville-Tonasket Irrigation Project is being done in three phases. The first phase is the Cordell and Crater Lakes pumping plants from the Okanogan River. The second phase is the Bonaparte-Tonasket and another pumping plant. The third one is the Osoyoos pumping plant.

Bonaparte is in the second phase of the construction and is in the central area of the project on the Okanogan River. For some reason it has worse sedimentation problems than the others do. So, we are using that system as a test to be sure that the proposed solution, which is sediment ponds and related changes to the system will work on that system. That work will be done in 1989. The rest will be done in 1989 and 1990.

Senator EVANS. How certain are you from your current designs and from whatever experience exists out there in the use of settling ponds and pumps that this design finally will work given the river conditions that we have?

Mr. KEYS. The experience factor that we have cranked in from the irrigation districts that have used settling ponds in that area indicate that it will work. The districts have used settling times that range from 15 minutes to several hours. We are using that experience in our design data collection. We are designing longer periods for settling of the material than have been used by those districts.

Our value engineering team is fairly sure that these settling ponds will work. I say fairly sure. We have no indication that they

will not work. We hope to use the Bonaparte system to prove to ourselves that it will.

Senator EVANS. The requirements are so large in this kind of construction that it will take that much time to finish whatever design there is and to actually get in the river and construct. The farmers are going to have to go for another two years without adequate water?

Mr. KEYS. Yes, that's true. The contracting process, the design process, and utilizing other manufacturers' data will take that long.

Senator EVANS. No way in your view to speed up the process. It seems to me that this is a lot smaller project than some of the ones that we did in the Yakima River. And we did those a whole lot faster.

Mr. KEYS. One of the problems that we have right now is that we are not able to start the designs or to keep them going without a ceiling increase. We have done design data collection work in the field. We have the value engineering team report. We do have some preliminary designs under way right now. But we can't devote our full efforts to it until the ceiling increase is authorized.

Senator EVANS. It was my understanding that you said that you had run out first in the middle of July and then we had later word that it wouldn't be till the end of the fiscal year. And we are trying to insure that you can move ahead. Now, what is the real story? Why can't you proceed full tilt on something that has been badly handled as this up to now?

Mr. KEYS. The estimates that we had before, that said our funds would run out in July, were based on corrections that had been made for cost indexing and other changes to the project that were not the responsibility of the project, such as environmental requirements that were passed by law during the time, the sort of thing.

We were able to make a correction in that ceiling based on the use of metrics on the project. That caused the contractors to have additional expenses. We were able to make that correction and give ourselves more operating money to get us through the end of the fiscal year.

Senator EVANS. It's more operating money, but you will have to work at a slowed pace?

Mr. KEYS. That's correct.

Senator EVANS. You have no way of modifying that or changing that barring——

Mr. KEYS. No, sir. At that time we will be at the ceiling. We have adjusted that ceiling in every way that we feel is legal up to now.

Senator EVANS. You may be at the ceiling, but you can't proceed ahead as fast as possible just on the design. You are obviously not going to spend a whole lot of money on design compared to the ceiling. It is just a question of—in fact, you cannot even proceed ahead on design in anticipation of a new ceiling?

Mr. KEYS. That's right.

Mr. DUVALL. Untill we get more ceiling.

Senator EVANS. Mr. Chairman, I will have a number of other questions I'll submit for the record rather than extending this hearing. But it seems to me I will ask questions and expect some answers, including something in the nature of a history of this

project. We ought to learn something from what we did or what we didn't do in the past. And I will have a series of questions along that line to try to elicit from this rather sorry experience some evidence that will help us in the future.

Senator BRADLEY. Thank you very much, Senator Evans.

I have a few questions I would like to address on the various bills. Let's take S. 649 first.

The original cost of S. 649 was $39 million. Is that correct? Estimated cost.

Mr. DUVALL. That's correct, $39,370,000.

Senator BRADLEY. Now it looks like with this particular fix that it will be up to $88 million. Is that correct?

Mr. DUVALL. $88 million in January 1987 dollars as opposed to the $39 million in January 1976 dollars.

Senator BRADLEY. What is it in 1976 dollars?

Mr. DUVALL. That is when the original ceiling was established.

Senator BRADLEY. You are saying that the $88 million is—let's compare apples and apples.

Senator EVANS. What would be the $39 million in 1987 dollars?

Mr. DUVALL. I think I have that. It's $71 million.

Senator BRADLEY. That's $71 million.

Do you know what the price of an acre of farmland goes for in the area?

Mr. DUVALL. It is pretty substantial. It depends on the type of land. The bulk of the irrigated lands up there are in apple orchards, and some of those are quite valuable properties.

Senator BRADLEY. You don't know the answer though.

Mr. DUVALL. I don't know the exact amount.

Senator BRADLEY. The price per acre?

Mr. DUVALL. I don't know on this particular plan what the average would be.

Senator BRADLEY. Maybe you could submit a range to the record. Do you know, Mr. Keys?

Mr. KEYS. If you are talking about the irrigated pastures and so forth, the range is probably $200 to $500 an acre, maybe more.

Senator BRADLEY. So, $200 to $500.

Mr. KEYS. In talking about the orchards, it is several times that, and can range from $1,000 to $3,000 an acre.

Senator BRADLEY. And this projects serves 10,000 acres. Is that right?

Mr. KEYS. That's correct.

Senator BRADLEY. And now at about an average cost of $7,000 an acre?

Mr. KEYS. That's correct.

Senator BRADLEY. And acreage goes for—what did you say—$300 to $400 an acre?

Mr. KEYS. That's for the small amount of the project that irrigates pasture and hay. Most of the project irrigates apple orchards. That cost range is $1,000 to $3,000.

Senator BRADLEY. That's $1,000 to $3,000.

Mr. KEYS. Yes.

Senator BRADLEY. What is the Bureau's explanation for its failure to anticipate the design problem?

Mr. KEYS. When we originally investigated the project, there was a sediment problem identified in the river. At that time the irrigation district asked us and we agreed to look at installing infiltration galleries in the river. After our engineering experts examined that possibility it appeared to them that the infiltration galleries would work for a while and then clog up. So, we started looking for a different solution.

Senator BRADLEY. Would clog up with the glacial flour.

Mr. KEYS. That's correct. In other words, with an infiltration gallery, you put a pipe under the river. The river sands act as a filter. The flour and the other sediments would eventually clog up those pipes.

Manufacturer's literature from Lakas, who makes the separators indicated they had a separator that, without mechanical means, in other words by a vortex, would separate 98 percent of the sediment greater than 50 microns out of the water. It's greater than 75 microns. I'm sorry.

Our engineers looked at it and believed that that would work. We installed those separators and, during the first year's experience, they did not work.

We went back to the manufacturer who contracted for studies—we contracted for studies—that showed they were not removing 98 percent of the material. In fact, they were only removing about 30 percent of the material.

After a restudy by our staff and the manufacturer, they came back with a recommendation that we install another set of separators and modify the first ones. We agreed to that. The manufacturer picked up part of the cost, and we picked up part of the cost.

We installed those over this past winter. And this spring again they didn't work.

We are now negotiating with the manufacturer, and we have gone back to the irrigation district and are working now on the settling pond concept. There we would take the water out of the river, settle it for a certain period of time, then pump it into the system.

We also installed some strainers to take the organic material out.

Senator BRADLEY. Do the engineers still work for the Bureau?

Mr. KEYS. Yes, sir.

Senator BRADLEY. What is their explanation for their misjudgment?

Mr. KEYS. We are still negotiating with the manufacturer to see where the original separators were wrong. I don't have an answer for you.

Senator BRADLEY. Okay. Let me move on to——

Senator EVANS. Mr. Chairman?

Senator BRADLEY. Yes.

Senator EVANS. Could I just continue with one other? Isn't it also true that there are extensive payments to contractors that are included in this request for cost overruns that were accrued by the contractor for work that had to be done that was not contemplated by the original design?

Mr. KEYS. There are some contractor claims included in that. The first contractor claim is for about $2.2 million on stage 1 of the project. We have a claim on schedule 2 of about a million and a

half dollars. And we have an estimate of some claims that may come on schedule 3.

Senator EVANS. Was that first one a claim for building a tunnel under the river rather than digging a trench across the river?

Mr. KEYS. In the original specification for the project, it was left to the contractor as to how he would install those pipelines under the river. We supplied him geologic data. He could make his own choice of whether to dig the ditch across the river or tunnel them or push them under. He decided to try to push them under. The contractor had lots of problems with that, and came back with a claim that said that the geologic data we furnished was not sufficient. That is the basis of that claim.

Senator EVANS. It's my understanding that the Department originally anticipated in the original design a trench across the river laying claim that it was in the changed regulation that prevented them from doing that.

Mr. KEYS. That was part of it. Our original estimates were based on digging the ditch across the river, but yes, there was some changed regulations there. These are regulations tied to the anadromous fishery in the area.

Senator EVANS. And you believe the regulations were not changed until—the regulations prior to 1976 would have allowed a trench across a fish producing river?

Mr. KEYS. At that time, yes. I understand that the regulation changed after the original specifications were put together.

Senator EVANS. I think you will find that you are wrong, that there was no way that an approval for a trench across a fish producing river in 1976 would have been granted.

Okay, Mr. Chairman.

Senator BRADLEY. Thank you very much, Senator Evans.

Let me, if I could, now ask a question too on S. 1549.

Senator CONRAD. Mr. Chairman, before we leave the previous bill, might I just ask two quick questions?

Senator BRADLEY. Certainly.

Senator CONRAD. Could you tell us? What was the additional cost as a result of the deficiency of the manufacturer's product? You indicated that the manufacturer had indicated that it would be some 80 percent efficient or more in the removal of the sediment, and then it proved to be only 30 percent effective. What was the additional cost experienced as a result of the deficiency of the manufacturer's product?

Mr. KEYS. The original estimate that they gave us is that the separators would remove about 98 percent of the sediment material. With the corrections and the new separators added this past winter, the cost was about $1.6 million.

Senator CONRAD. And one other thing, Mr. Chairman, if I might.

What part of that cost did the manufacturer bear?

Mr. KEYS. There's about $600,000 borne by the—let's put it this way, $600,000 is his cost in adding those separators. We are now in negotiation to determine how much of that he will bear and how much will be borne by the government.

Senator CONRAD. Well, Mr. Chairman, that would seem disturbing. If a manufacturer asserted that his product would perform to a certain tolerance level, it failed, the result was additional cost

borne by the government of $1.6 million, and now as I understand the answer you have given, we are negotiating over what part of $600,000 of that cost he will bear. Is that correct?

Mr. KEYS. That's correct.

Senator CONRAD. Doesn't that seem unfair?

Mr. KEYS. Yes.

Mr. DUVALL. That could very well be why we expect that probably it will result in litigation—that and other costs that may come to bear.

Senator EVANS. I wonder if the Senator would yield for just a moment on that.

Did you give to the contractor certain specifications as to the nature of the water that he was trying to purify?

Mr. KEYS. Yes, there were specifications given to him.

Senator EVANS. Did the water actually—was that an accurate anticipation of what the water quality really was, or did the water quality turn out to be a whole lot worse than the specifications that you had given him?

Mr. KEYS. That is one of the problems that we face.

Senator EVANS. In other words, you can't hold the contractor to that if he was told one thing that he had to perform to and perhaps did perform to that, but found that he was being required to do a whole lot more than he was originally told.

Mr. KEYS. That's a large part of the problem that we are dealing with and negotiating with.

Senator BRADLEY. Thank you very much, Senator Evans.

Now, Mr. Duvall, you have offered no testimony on S. 1549, have you, other than what you have submitted to the record?

Mr. DUVALL. Not at this moment I have not. I have a statement here.

Senator BRADLEY. Do you want to make a few comments on S. 1549?

Mr. DUVALL. I have a statement for the record which has been submitted, Mr. Chairman.

At the present time the Bureau of Reclamation has sufficient funds unlike Oroville-Tonasket, to continue working on the Closed Basin project through Fiscal Year 1988. We are pleased, however, that the committee is looking at this authorization ceiling at this point in time.

Director Miller of the Office of Management and Budget intends and has expressed an intent in a letter to the Senators from the State of Colorado that OMB will be looking at and addressing the question of ceiling authorization in the Fiscal Year 1989 budget process. Therefore, we do not have a position at this time that says we are in support of a ceiling increase in its entirety or that we are opposing it because it came a little bit out of sequence from when the administration expected it.

We do recognize, however, that in order to complete elements of stage 4 of the project, we will have to have some increase in the ceiling.

[The prepared statement of Mr. Duvall on S. 1549 follows:]

Statement of C. Dale Duvall, Commissioner, Bureau of Reclamation, Department of the Interior, before the Senate Subcommittee on Water and Power, Committee on Energy and Natural Resources on S.1549, a bill to raise the appropriation ceiling for the Closed Basin Division, San Luis Valley Project, Colorado

August 5, 1987

Mr. Chairman, I am pleased to appear before your committee today to testify on S.1549.

This legislation would increase the authorization ceiling for the Closed Basin Division, San Luis Valley Project, Colorado. Based on OMB Director Miller's letter of June 19, 1987, the Administration will reach a decision on the authorization ceiling to complete the final stages of the project in the context of the fiscal year 1989 budget. We should also note that we have not requested an appropriation to proceed immediately with construction of Stage 5 of the project. Stage 5 is included among those projects and project features that have been delayed temporarily in order to concentrate construction resources on projects that are nearest to completion. I will further justify this position later in this statement.

The Closed Basin Division was authorized by Public Law 92-514, as amended. Construction began in 1980 and is currently about 65 percent complete. The Division is located in the San Luis Valley, a broad basin about 115 miles long and 50 miles in maximum width, in south-central Colorado.

The primary purpose of the Closed Basin Division is to deliver pumped ground water from the basin to the Rio Grande, to assist the State of Colorado in meeting its commitments to the States of New Mexico and Texas under the Rio Grande Compact, and to the Republic of Mexico under the Rio Grande Convention of 1906. The project also is designed to provide for: (1) deliveries of water to the Alamosa National Wildlife Refuge and Blanca Wildlife Habitat Area; (2) stabilization of San Luis Lake at about 890 surface acres; (3) recreational facilities at San Luis Lake; (4) fish and wildlife enhancement; and (5) the sale of water for irrigation and other beneficial uses in Colorado.

Under the completed project, water pumped from wells drilled into unconfined aquifers within the basin will flow through laterals to a conveyance channel which will deliver it to the Rio Grande. The basin, a physiographic subdivision of the San Luis Valley covering about 2,940 square miles, is not drained by the Rio Grande. It is a natural depression that collects water and acts as a sump for the upper valley. Most of the water collected in the basin evaporates and is lost for any beneficial use.

The project's well fields were designed for development in five stages over a 10-year period. Stages 1-2 were completed in 1985, Stage 3 will be essentially completed in 1987, Stage 4 is scheduled for completion in 1990, and Stage 5 is scheduled for completion in 1994. The project concept is that the designs for each successive stage would be progressively refined on the basis of data collected in connection with construction, testing, and operation of the preceding stage.

Based on recent estimates of project cost, the Bureau of Reclamation now has concluded that it will be unable to complete construction of the authorized project within the current authorized appropriation ceiling of $75,176,000 indexed to October 1987 prices. An insufficient appropriation ceiling was first recognized in Reclamation's Definite Plan Report (DPR) of November 1979 which first addressed the possibility that modifications in the project would exceed the indexed appropriation ceiling.

Since its authorization in 1972, project modifications have occurred as a result of: (1) changes in the hydrologic regime of the Closed Basin; (2) continuing investigations by Reclamation to optimize the salvage of ground water; (3) changes to minimize environmental impacts; (4) measures to enhance recreation and fish and wildlife; and (5) external requirements such as Executive Orders 11990 and 11988 (Protection of Wetlands and Flood Plain Management, respectively). The original project plan, as presented in House Document 91-369 (July 20, 1970), called for two conveyance channels and unlined canals. However, in order to accommodate wildlife considerations, the east side conveyance channel was deleted. Canals also have had to be lined to prevent seepage loss and erosion. The remaining conveyance channel was realigned to pass through the northwest portion of the Alamosa National Wildlife Refuge.

In addition, the means of delivering water to San Luis Lake have been changed for salinity control reasons. The 1979 plan called for pumping water from the well field above Heed Lake and east of San Luis Lake and delivering it through the natural drainage system. Pumping of water into the lake created additional inflow which, without some positive outflow, would not alleviate salinity problems.

The current project plan calls for diverting water into the north end of the lake from the conveyance channel and pumping water from the south end of the lake back into the conveyance channel. This flow-through procedure will prevent buildup of salts in the lake, thus permitting aquatic life to flourish. Pumping from ground water will allow for flexibility of operation to control salinity.

Configuration of the well field was redesigned to avoid areas of low productivity and poor water quality. The well field was originally designed to be operated manually, with high labor costs projected throughout the life of the project. Under the current plan, wells will be controlled by a programmable master supervisory control system consisting of a microprocessor, radio repeater, and necessary software and remote terminal units at each well. This change will significantly reduce future labor costs.

Establishment of the Mishak National Wildlife Refuge was reevaluated with respect to size and water requirements and, during construction of stages 1-2, was eliminated by Public Law 98-570, October 30, 1984. That Act established the Russell Lakes Waterfowl Management Area.

In June 1987, a complete reevaluation of the original project cost estimate encompassing the above changes was completed. That reevaluation concluded that the estimated project construction cost will exceed the indexed authorized appropriation ceiling by $24,824,000.

An increase in the appropriation ceiling by fiscal year 1989 is needed before we can let the contracts that are essential for completion of Stage 4 of the project. Completion of Stage 5 is not presently treated as a high priority because unusually high stream flows in the last three years have resulted in an over-fill position at Elephant Butte Dam. Consequently, the State of Colorado's downstream obligation has been fulfilled for the moment.

Mr. Chairman, that completes my statement. I will be happy to answer any questions you may have.

Senator BRADLEY. How much?

Mr. DUVALL. The stage 5 elements are about $7.4 million and the total was $100 million. So, an increase up to about $92.5 million would cover the elements of stage 4.

Senator BRADLEY. And what was the original estimates of this project?

Mr. DUVALL. The 1980 authorization was $57,139,000.

Senator BRADLEY. So, it is now up to $92 million.

Mr. DUVALL. The total project would require $100 million.

Senator BRADLEY. It's $100 million. So, it is double.

Mr. DUVALL. That's correct.

Senator BRADLEY. Can you tell me? Do Colorado residents pay any of the costs of this project?

Mr. DUVALL. They will not pay any of the costs that will result from the first two benefits which will be perfected at the conclusion of stage 4. The costs that will be reimbursable will come from the benefits that will flow from stage 5.

Senator BRADLEY. So, how much of the $100 million is reimbursable?

Mr. DUVALL. That will depend upon the ratio between the yield of the project and the amount of water that can actually be beneficially used by Colorado interests.

Senator BRADLEY. You do not have any idea?

Mr. DUVALL. Well, it is a conjunctive water project, Mr. Chairman, that will pump larger quantities of water when the Rio Grande Compact States need more water in order to fulfill their obligations to the Republic of Mexico and to meet their own water needs.

Senator BRADLEY. But again, my question is no one has made estimates as to what you project, I mean, given historical usage, given historical rainfalls, if you look at the Colorado River and what has to be downstream, how much is used in Colorado, et cetera? Is there a range here that you can give us?

Mr. DUVALL. The rainfall in the project area varies dramatically. From 1952 until 1984 there was a considerable deficit. During that period, the State of Colorado was never out of debt to the downstream States.

However, that deficit has been eliminated because Elephant Butte Reservoir has been entirely filled and has overflown the last three years in succession so the downstream debts by the State of Colorado are now extinguished. Mexico is fully paid. The State of New Mexico and Texas have no obligation from Colorado.

The State of Colorado is hoping, before the weather cycle turns again, to engage in some discussions about conjunctive use and coordinated operation of both surface supplies and the Closed Basin project in order to maximize the benefits that the project will be able to deliver to the three-State area.

Senator BRADLEY. If the project were stopped at its current ceiling, how much water would be delivered or could be delivered?

Mr. DUVALL. We are dealing with somewhat of an undefined water basin in this closed basin. Assuming that the water tables stay firm and the quality is sufficient so that we can draw upon any mix of wells that we should choose to draw upon, we could generate as much as 57,000 acre-feet from the project at the conclusion

of stage 3. We would not complete stage 4 which would generate another 30,000 acre-feet.

Senator BRADLEY. That's 87,000 acre-feet?

Mr. DUVALL. Only if the current ceiling is raised to $92.5 million and stage 4 is completed.

Senator BRADLEY. Okay, as opposed to 108,000 which is what is projected.

Mr. DUVALL. I believe that's correct.

Senator BRADLEY. Let me ask you, if I could, about—I will ask you to submit for the record your testimony on S. 641. You don't need to summarize it.

Mr. DUVALL. OK.

[The prepared statement of Mr. Duvall on S. 641 follows:]

TESTIMONY OF
COMMISSIONER C. DALE DUVALL
BEFORE THE SUBCOMMITTEE ON WATER AND POWER
OF THE ENERGY AND NATURAL RESOURCES COMMITTEE
UNITED STATES SENATE
ON S. 641, A BILL, "FOR THE RELIEF OF
THE CITY OF MINOT, NORTH DAKOTA"

Mr. Chairman, thank you for the opportunity to comment on S. 641, a bill "For the relief of the city of Minot, North Dakota."

The Department has no objection to enactment of S. 641, which would relieve the city of Minot, North Dakota, of costs associated with the excess capacity of the Minot Pipeline constructed for use with the deauthorized Garrison Diversion Unit features.

The Garrison Diversion Unit, conceived in the 1944 Flood Control Act (58 Stat. 891), was reauthorized for construction in 1965. The initial reauthorization made no provision for the city of Minot water supply system. In the Act of September 25, 1970, Congress authorized the Minot Extension of the Garrison Diversion Unit. The authorization provided for first phase construction of the 3.4-mile Sundre Pipeline to develop the Sundre aquifer and a 3.7-mile segment of the Minot Pipeline leading to the city's water treatment plant. The second phase involved diversion of Garrison Diversion Unit water through the Velva Canal and construction of an additional pipeline and storage facilities connecting the Velva Canal with the Minot Pipeline. A portion of the Minot Pipeline was sized and constructed large enough to carry both Sundre water and Garrison Diversion Unit water. Section 1(e) of the Garrison Diversion Unit Reformulation Act of 1986 deauthorized the Velva Canal and other Garrison Diversion Unit facilities. Due to the project reformulation, no Garrison Diversion Unit water will be delivered through the Velva Canal.

On January 26, 1972, the city entered into a contract for the repayment of costs associated with the construction of the first stage of the Minot Extension Unit. The contract provided for the construction of the Sundre Pipeline and the first segment of the Minot Pipeline. The city's obligation under that contract is $3,781,560.51. The pipelines were constructed, and the city has made 18 payments totaling $1,100,000 through July 1, 1987. The last several payments were made under protest as the city believed that water would not be delivered through the Velva Canal. The city has requested the Bureau of Reclamation to cancel costs related to the capacity designed and constructed for Garrison Diversion Unit water which will be unused under the Reformulated Project. As stated in the proposed bill, a total of $1,026,489.29 for excess pipeline capacity was agreed upon by the Minot City Auditor and the Bureau of Reclamation. The proposed bill should be clarified to indicate the date the reduction should take effect. If the city is relieved of the $1,026,489.29, plus interest on the unpaid balance, which represents the loan reduction retroactive to January 1, 1978, the start of the city's repayment, the remaining obligation under the 1972 contract would be approximately $2,367,617.13. However, if the loan reduction is retroactive to May 12, 1986, the date the Garrison Diversion Unit Reformulation Act was enacted, the remaining obligation would be approximately $2,727,740.45. This is the only facility for which repayment has been initiated.

The Reformulation Act, its legislative history, documents submitted by the Department of the Interior in support of the Reformulation Act, and the Garrison Diversion Unit Commission Final Report are silent regarding the

Minot Extension. The lack of mention of the Minot Extension in those documents leads to the conclusion that there is no relief from the existing repayment contract for the city of Minot in the Reformulation Act. However, the Garrison Reformulation Act makes nonreimbursable costs associated with unused capacity for other Garrison features, including Snake Creek Pumping Plant, McClusky Canal, and the New Rockford Canal. We believe that the unused capacity of the Minot Extension resulting from Velva Canal should also be nonreimbursable. We note that provisions of S. 641 require the city of Minot to repay the United States for costs of unused capacity if the city ever uses the full capacity of the Minot Pipeline. Therefore, we have no objections to the proposed legislation.

Thank you for the opportunity to present the views of the Department of the Interior. I would be pleased to answer any questions you may have.

Senator BRADLEY. I would like to ask you a question on a decision that was taken last Friday, a new policy on water acreage limitation abusers. Is it true that the Department of the Interior announced a new policy last week?

Mr. DUVALL. Yes, it is.

Senator BRADLEY. And could you tell me three or four of the components of that policy?

Mr. DUVALL. What the Department is acting in——

Senator BRADLEY. I know what the components are, so don't tell me. Let me ask you a question about one of them.

Mr. DUVALL. Okay.

Senator BRADLEY. As I understand it, one of the things was to move the Bureau of Reclamation's Acreage Limitation Branch from Denver to Washington. Is that correct?

Mr. DUVALL. The Acreage Limitation Branch——

Senator BRADLEY. Right.

Mr. DUVALL [continuing]. Is scheduled to be moved either in function or in title to the Washington office.

Senator BRADLEY. Yes. Now, what was the basis of that decision?

Mr. DUVALL. To raise the level of oversight so that the Bureau of Reclamation would have among its operation the regions which have primary responsibility for customer relations, you might call it, dealing with the water districts, dealing with the members of the water districts, then compiling compliance reports and acreage certifications. That would be at the regional level, and then the task force that was created for oversight purposes would represent a kind of a—I hate to use the term policing, but I guess for lack of a better word, that might be what I should use. But it would be an oversight or an appeals level that could look at possibilities of abuse or inconsistent treatment between one region and another.

And the branch being in Denver just does not fit into that scheme very well, and so the decision was made to move the branch here so that it would be facilitating the task force's role.

Senator BRADLEY. Wasn't it the Denver office that had the documentation on acreage abuses?

Mr. DUVALL. The documentation on acreage what?

Senator BRADLEY. Abuses.

Mr. DUVALL. Abuses?

Senator BRADLEY. Yes.

Mr. DUVALL. I wouldn't say that they have documentation on it.

Senator BRADLEY. My question is are the personnel that were working on this in Denver moving to Washington?

Mr. DUVALL. That's the plan, yes.

Senator BRADLEY. They are.

Mr. DUVALL. Yes.

Senator BRADLEY. So that the institutional memory is going to be there. It will simply be moved when the personnel move to Washington, D.C.

Mr. DUVALL. Yes, that's correct.

Senator BRADLEY. Okay. Thank you very much, Mr. Duvall, for your testimony.

Our next panel——

Senator CONRAD. Mr. Chairman, if I just might on 641.

Senator BRADLEY. Certainly.

Senator CONRAD. I just want to note for the record that Mr. Duvall has indicated that the administration would be supportive or at least not oppose 641. And is that a correct statement of the position of the administration?

Mr. DUVALL. That's correct. We have no objection to the enactment of the bill. We feel that it is fair and justified.

Also, with respect to the amount, the amount that is to represent the retroactive capital adjustment has been agreed to between the auditor of the City of Minot and the Bureau of Reclamation's accounting people. So, that amount is not in question.

As was pointed out by one of the earlier witnesses, we would appreciate clarification as to the date that the retroactive adjustment should take effect because that changes the accrued interest charges that need to be adjusted.

Senator BRADLEY. And all of that is in your testimony.

Mr. DUVALL. That's in our testimony.

Senator CONRAD. Mr. Chairman, I would just like to note for the record that I will offer an amendment at the time of markup to make clear the date at which we are going back retroactively to take account of the interest. It would appear reasonable that that date be January 1, 1978, which was the start of the city's repayment so that they would be, in effect, held harmless for the excess capacity in that line. Obviously, that makes some substantial difference to the city, and it would seem to be fair. So, at the appropriate time in the markup, I will offer an amendment to take care of that problem and clarify it.

Mr. DUVALL. Yes. The difference in the computations would make about a $360,000 difference. So, it is a significant impact on the city.

Senator CONRAD. Yes. I want to thank you for the position that you have taken. I think we appreciate very much the willingness of the administration to correct this error, which I think was largely oversight.

Mr. DUVALL. Thank you.

Senator BRADLEY. Thank you very much, Mr. Duvall, Mr. Keys.

[Subsequent to the hearing Mr. Duvall submitted the following:]

United States Department of the Interior

BUREAU OF RECLAMATION
WASHINGTON, D.C. 20240

IN REPLY REFER TO: 730

AUG 14 1987

Honorable Bill Bradley
Chairman, Subcommittee on
Water and Power
Committee on Energy and
Natural Resources
United States Senate
Washington, D.C. 20510-6150

Dear Mr. Chairman:

Responsive to your letter of August 6, enclosed for inclusion in the hearing record on S.649 are our responses to questions raised by Senator Evans concerning the Oroville-Tonasket Unit, Washington.

We are pleased to assist you in this matter.

Sincerely yours,

C Dale Duvall

C. Dale Duvall
Commissioner

Enclosure

Responses to Questions Raised by Senator Evans
Concerning the Oroville-Tonasket Unit, Washington

1. The primary reason we are here today is to raise the authorization ceiling level on the Oroville-Tonasket Irrigation Project to $88 million. Close to $16 million of the additional $18 million we are seeking in this bill relates directly to problems encountered with the project due to inadequate analysis, faulty design, faulty materials, or assumptions made that are unrealistic. For instance, one of the large claims the federal government had to pay involved a design to cut a trench across the Similkameen River. However, when the contractor went to get the required state permit, it was denied, and the contractor had to cut a tunnel under the river, at a substantially higher cost. Why wasn't something so basic as a required state permit taken into consideration in the original plans? What is the Bureau doing to reclaim costs from contractors who supply faulty materials? How much do you estimate the government can recover from contractors who have contributed to the problems experienced on this project?

Answer: Actually, there were no claim payments made for the Similkameen River crossing which was constructed according to specification by installing a siphon across the river. On the Okanogan River, the required State permits were in place before construction began on the river crossings. The contractor for Schedule II (Ellisford, Tonasket, and Bonaparte Creek systems) requested a change under the contract to permit use of boring methods to drill horizontally under the river for the river crossings. The requested change required no additional permits. However, subsequent failures of the boring methods did cause the contractor to pursue and acquire additional permission to open-cut a portion of two crossings.

The Bureau is scheduling a meeting with the Schedule II contractor and the pump manufacturer to discuss the reimbursement of costs and repair and/or replacement of faulty equipment. The Government does not yet know the full extent of the damages for which the contractor and its suppliers will be responsible.

The manufacturer of the second set of separators, which were furnished to solve the sediment problem, has been notified that the equipment provided is not meeting performance specifications.

It presently is anticipated that the Schedule II contractor and suppliers will be responsible for all costs incurred to repair the pumps. Also, the Government will seek reimbursement from the separator supplier for the costs of the inefficient separators.

2. The largest chunk of the increased authorization will go to fix the problem encountered with the design of the system due to siltation in the river. Can you explain what preliminary investigative work the Bureau did to determine the level of silt that would occur in the river. In your opinion was that level of analysis adequate? If you believe it was inadequate, what has the Bureau done to ensure that basic mistakes like that cannot happen again?

Answer: Water samples were acquired at each of the pumping plant sites and other sites throughout the project area. Those samples were taken during flood flows and low flows in the river. The samples were analyzed to determine the amount, type, and size of suspended material in the water.

We believe the analysis was adequate; however, the separators used on the pumping plants to remove the suspended material did not perform as represented by the manufacturer and specified by Reclamation.

3. The Bureau has now agreed to construct settling ponds at five of the intake pumps located along the Okanogan River to allow for the removal of silt from the water before entering the distribution system. Are you confident that this will provide an adequate solution to the situation? I understand that the Bureau may build these ponds to be gravity-fed from the river, or may use pumps to deliver the water to the ponds. Can you explain what will be the effects on costs of construction and on costs of operation and maintenance between the two systems?

Answer: We are confident that settling ponds will work, as they have been a proven solution in this and other areas of the country. Settling ponds were considered early in the project, but were not selected due to the cost of construction.

If we are required to provide the drum-type fish screens similar to what is being used on the Yakima River, the construction costs would be 20 to 40 percent higher for the gravity-flow plan over the low-head pump plan. Also, gravity-fed ponds would not be practical in most cases, due to their depth and associated stability problems. O&M costs should be about the same for either plan.

4. Can you provide a present estimate of when construction on the project is likely to be complete? When the construction of the Oroville-Tonasket Irrigation Project is complete, can you provide an estimate of what the annual operation and maintenance costs will be? How does this compare to the original representations of the Bureau to the growers in the District of the annual operations and maintenance costs? In your opinion, will this cost be affordable for the growers? Is there anything that can be done to reduce the annual operations and maintenance costs for the growers in the District.

Answer: Based on the current schedule, the Bureau of Reclamation estimates project completion in the spring of 1990. Based on 1987 prices, it is estimated that the annual operation and maintenance and construction repayment cost will total about $105 per acre. The Definite Plan Report estimated that the annual operation and maintenance and construction repayment (July 1978 prices) would be about $62 per acre (or $96 per acre when adjusted to 1987 price levels). If prices for apples remain stable and power cost remain stable, the cost should be affordable. We currently have an O&M specialist working with the irrigation district trying to find ways to reduce the O&M costs.

Senator BRADLEY. Our second panel will be the Honorable George Christensen, Mayor of the City of Minot, North Dakota, and the Honorable Edward Kuhn, Councilman, the City of Minot. Gentlemen, welcome to the committee. Please make yourself comfortable, pull the microphone up, pull the glass of water close to you, and we welcome your testimony.

STATEMENT OF GEORGE CHRISTENSEN, MAYOR, MINOT, ND

Mr. CHRISTENSEN. Mr. Chairman, members of the subcommittee, my name is George Christensen, and I am Mayor of the City of Minot, North Dakota. And I am here to testify this afternoon on behalf of S. 641.

Minot is a city of 33,000 people which acts as a service, cultural, educational, medical and social center for most of northwestern North Dakota. Minot Air Force Base is located 12 miles north of the city.

When the base was built, the city agreed to supply water. Since that time, we have also agreed to furnish water to a large, adjacent, rural water association. So, Minot's water system now serves over 50,000 people.

Since its early history, Minot has obtained water from the Souris River, which flows through town, and from the Minot aquifer which is directly underneath the town site.

The Minot aquifer is replenished by river and rainfall, but since we live in a semi-arid region, there are times when the river flows and rainfall are almost nonexistent. Generally water usage increases during dry periods so aquifer levels decline dramatically.

In the 1950s it became apparent that the Minot aquifer and the river would not be sufficient to supply an adequate water supply. We then looked toward the Garrison Reservoir as a permanent solution to our water supply problems.

In the early 1960s a pipeline to the Garrison Reservoir was proposed. However, at that time a United States Geological Survey hydrologist stated that Minot could drill one well per mile in the river valley upstream from Minot and obtain one million gallons of water per day per well.

In the early 1960s we enlarged our water plant and constructed transmission lines to serve the Minot Air Force Base and then began a testing program of the area upstream. Test holes showed that the geological survey was incorrect. There was no underground supply upstream. So, seven new wells were drilled in the Minot aquifer. Increased pumping lowered water levels drastically by 1964 and, in fact, some of our older wells were dry holes by that time.

During the 1960s, plans were developed by the Bureau of Reclamation for irrigation of 250,000 acres northeast of Minot through a canal system from the Garrison Diversion Unit. The Bureau proposed that Minot receive its water supply from these irrigation works since the principal canal would be located only 12 miles east of the city. However, the time frame for construction of the canal system was a long way off, and the city desperately needed adequate water and soon.

In the late 1960s, the North Dakota State Water Commission discovered a large aquifer southeast of the city. Testing indicated that 6 million gallons per day could be withdrawn from the aquifer without significant drawdown of the water levels. This source of water looked like it would solve Minot's problem until Garrison water was available.

We then contracted with the Bureau of Reclamation to build a pipeline from the newly discovered aquifer to our water treatment plant. This pipeline is about 7 miles long with approximately one-half of the line oversized to accommodate water from the Garrison irrigation canal system. The first part of the pipe is 24 inches and the 3½-mile oversized section is 48 inch pipe. The Bureau of Reclamation planned that the water would be piped from the canal system to a manmade reservoir north of Minot and water would then be fed to the water treatment plant through the 48 inch pipeline I just mentioned.

The Bureau and the city reasoned that since a contract was being signed to provide an interim water supply line, at least part of the system should be sized to accommodate the delivery of water from the Garrison Diversion Unit.

As you know, the compromise on Garrison Diversion precludes the development of any irrigation in the vicinity of Minot. The compromise also proposes construction of municipal water supplies on a cost-sharing basis. If the line were built now from Garrison Reservoir to Minot, the line could not connect to any of the previously constructed system since the Garrison Reservoir is south of Minot's treatment plant and the 3½-mile segment of oversized pipe is north of the plant.

The Garrison Reformulation Act states: "Any investment related to features constructed by the Secretary that are no longer employed to full capacity pursuant to the recommendations of the Garrison Diversion Unit Commission Final Report shall be nonreimbursable."

This language was interpreted by the Bureau of Reclamation as intending to cover situations such as Minot's. But since Minot was not specifically mentioned, the Bureau asked that special legislation be introduced to allow reduction of our contractual obligations.

S. 641 authorizes a reduction of slightly more than $1 million. This is based on the Bureau of Reclamation's estimate of the cost of excess pipe capacity, and we agree with their method of computation.

We understand that the original contract amount will be reduced so that interest payments over the entire life of the contract will also be reduced. The original reimbursable cost was about $3.8 million. The passage of S. 641 would reduce the original contract repayment to about $2.8 million.

We are here to support this legislation and urge your favorable consideration. Thank you for your kind attention.

I have with me City Council President Ed Kuhn, who would also like to testify on behalf of the legislation.

Senator BRADLEY. Councilman Kuhn, welcome.

STATEMENT OF EDWARD KUHN, PRESIDENT, MINOT CITY COUNCIL, ACCOMPANIED BY ROBERT SCHEMPP, CITY MANAGER

Mr. KUHN. Mr. Chairman and members of the committee, my name is Ed Kuhn. I am an alderman from the City of Minot, North Dakota, and I am currently serving as City Council President.

I became a member of the Minot City Council in 1974 during that time that the pipeline was being constructed. At that time we thought it was only the first phase of Garrison Diversion and that soon we would be receiving waters from Garrison Dam through the interim Bureau of Reclamation pipeline.

This interim pipeline has now become a permanent transmission line from the Sundre Aquifer and will never be used for Garrison Diversion water. The project will not be built in its contemplated form because of the Garrison compromise. The reduction of our contract with the Bureau of Reclamation for oversizing of pipe is, therefore, completely justifiable.

The Department of the Interior seems to agree. An August 1986 letter from B.E. Martin, Regional Director of the Bureau of Reclamation, to our City Manager states: "The lack of mention of the Minot Extension in the Reformulation Act, the Legislative History of the Reformulation Act, the Garrison Diversion Unit Commission Final Report, or the Bureau's supporting documents lead to the conclusion that there is no relief from existing repayment contract for the City of Minot in the Reformulation Act. However, those same documents imply an intent on all parts that unused capacity of existing features should be nonreimbursable. That the Minot Extension was not included appears to be an oversight."

I am here to express the support of the Minot City Council for this legislation, and I thank Senator Burdick and Senator Conrad for sponsoring the bill and ask that this committee give its favorable consideration.

Thank you very much.

Mayor Christensen, City Manager Bob Schempp, and I will be happy to answer any questions.

Senator BRADLEY. Thank you very much, Councilman.

Senator Conrad?

Senator CONRAD. Thank you, Mr. Chairman.

I want to welcome the Mayor and the City Council President to Washington. And thank you very much for coming and making the case for Minot.

If I might, could you share with the committee briefly what the effect would be if we were not relieved of this payment? Have you got some notion of what it would mean to the average homeowner, what it would mean to the average taxpayer in Minot if we are not relieved of this payment?

Mr. KUHN. I guess that's a question the City Manager might be able to answer. I don't know if he is prepared for that or not.

Senator BRADLEY. The City Manager of the City of Minot——

Mr. SCHEMPP. Mr. Bob Schempp.

Senator BRADLEY. Welcome to the committee.

Mr. SCHEMPP. Mr. Chairman and Senator Conrad, the city is now paying about $150,000 per year on the contract. That payment will increase over time to about $300,000 or $400,000 per year.

It is interesting to note that any reduction in our contract amount because of this legislation will also affect the defense budget in that Minot Air Force is our largest user of water. So, one-third of any reduction will be passed back to the Federal Government in the form of a reduced water bill for Minot Air Force Base.

Senator CONRAD. That's a point I just wanted to make sure was brought here today. This is not a case—frankly, it is unusual that this is a situation in which the Federal Government is going to benefit by the action the Federal Government might take here in Washington. So, I wanted to make sure that this point was made.

Thank you, Bob.

Mr. SCHEMPP. Thank you, Senator.

Senator CONRAD. Let me at this point, Mr. Chairman, ask unanimous consent that my statement be entered into the record.

Senator BRADLEY. Your statement will be in the record in full.

[The prepared statement of Senator Conrad follows:]

STATEMENT OF

SENATOR KENT CONRAD

BEFORE THE SENATE ENERGY AND NATURAL RESOURCES COMMITTEE

SUBCOMMITTEE ON WATER AND POWER

August 5, 1987

I want to thank the distinguished chairman of this subcommittee, Senator Bradley, for agreeing to hold a hearing on S. 641, and I welcome my colleagues Senator Burdick and Congressman Dorgan. I also want to welcome Mayor George Christensen of Minot, City Council President Ed Kuhn and City Manager Robert Schempp.

S. 641 corrects an oversight. The first reauthorization of construction of the Garrison Diversion Unit in 1965 did not contain a provision for a water supply for the City of Minot. In 1970, however, Congress authorized the Minot Extension of Garrison, and the city contracted with the Bureau of Reclamation to construct a pipeline large enough to carry Garrison Diversion water from the Velva Canal. In 1986 the Garrison Diversion Reformulation Act deauthorized those portions of the project that would have delivered Missouri River water to the Minot Pipeline, and the City of Minot is

now left with the bill for a pipeline that it cannot fully use.

The Garrison Reformulation Act provides that "[a]ny investment related to features constructed by the Secretary that are no longer employed to full capacity pursuant to the recommendations of the Garrison Diversion Unit Commission Final Report shall be nonreimbursable." As the Regional Director of the Bureau of Reclamation stated in a letter to the City of Minot on August 22, 1986, the history of the Reformulation Act indicates that entities should not have to pay for unused capacities on existing features. The director concluded that exclusion of the Minot Pipeline from the repayment provisions of the Reformulation Act "appears to be an oversight."

S. 641 would reduce the original contract repayment from approximately $3.8 million to approximately $2.8 million. It also provides that if the excess capacity is ever used, the City of Minot shall reimburse the federal government for the costs associated with that use. The bill is an equitable solution to a serious problem, and I will urge my colleagues on the committee to recommend swift passage.

Senator CONRAD. I want to publicly thank the Chairman for holding this hearing. We very much appreciate the time that you have taken, Mr. Chairman, other members of the committee, in hearing the case for the City of Minot. We appreciate it, and we feel very strongly that this is a reasonable request. It is fair and it ought to receive favorable consideration. Thank you very much.

Senator BRADLEY. Thank you very much, Senator Conrad.

Senator Evans?

Senator EVANS. No questions.

Senator BRADLEY. I would like to just ask one question. What is the budget of the City of Minot?

Mr. SCHEMPP. Our total budget, Senator, is $26,600,000.

Senator BRADLEY. Thank you very much.

Let me thank you all for your testimony. I appreciate it. You have come a long way.

Our last panel is Mr. Leland Robinson, Chairman of the Oroville-Tonasket Irrigation District, State of Washington; Mr. Richard Price, Attorney, Oroville-Tonasket Irrigation District, State of Washington.

Gentlemen, welcome to the hearing room, and I know that your presentation will not be distracted by the fact that the TV cameras have gone off. Welcome to the committee and I would also like to welcome to the committee Mrs. Robinson, who I think is in the audience. We are pleased to have you. Please begin in any order. If one of you want to speak and the other be available for questions, that is perfectly acceptable.

STATEMENT OF LELAND ROBINSON, BOARD PRESIDENT, OROVILLE-TONASKET IRRIGATION DISTRICT, STATE OF WASHINGTON

Mr. ROBINSON. Mr. Chairman and Senators, I am really glad to be here and appreciate the opportunity to talk on this.

I am the Board President of the Oroville-Tonasket Irrigation District.

And I have been in the orchard business for about 27 years. I have both apples and pears, and I have a little problem with the value of the lands as far as they are concerned there. I think you are talking more in the line of $5,000 an acre for apples and something around $8,000 for pears. However, those values with the real estate—sometimes, you know, right now the way it is, it may be a little high. That's what I'm telling you. But they are pretty close.

Under the old system we had a lot of problems in flumes that was along the rocks and this type of thing. It was falling down. It wasn't very secure. And so, we opted to go for this new system. We thought we were buying into something with clean water and a system we could really live with, you know, something that was good, pressurized, give us nice, even pressure. And that is what we still want.

We have gone far enough into this new system that there is no backing out. We can't go back. We have to go ahead. Some of the people would say, hey, I would like to go back to the old system. Well, it is halfway gone. It has been deteriorated, and there is no going back.

If we cannot make the new system work, then we are going to be in financial problems, in really deep financial problems. So, I feel very deeply that we need to get this working.

Now, some of the problems we are having are related mostly to rocks, sand and silt, but we do have some problems with pressure regulators that are not working. And most of these things do end up coming up because of the sand and silt problems we have.

We just feel that we have a right to have a good pressure system, that we contracted to have a good pressure system. The Bureau now is making some steps that we think probably come in the right direction. They are doing the engineering, and we feel that it is up to them to come up with the right solutions to the problems.

And I think that that is probably about all that I have to say right now, but I will be glad to answer any questions you have.

Senator BRADLEY. Thank you very much, Mr. Robinson.

Mr. Price, do you have any comments?

STATEMENT OF RICHARD B. PRICE, COUNSEL, OROVILLE-TONASKET IRRIGATION DISTRICT, STATE OF WASHINGTON

Mr. PRICE. Thank you, Mr. Chairman, Senator Evans. I want to thank this committee for the opportunity to participate in your hearing, and I would ask, Mr. Chairman, that my written submission on behalf of the Oroville-Tonasket Irrigation District that was submitted to Mr. Brown be made a permanent part of the record.

Senator BRADLEY. It will be submitted to the record in full. It has. It is even in my book.

Mr. PRICE. Thank you.

I felt the need to open my statement to this committee with a dramatic statement to get your attention. It is obvious after listening to the questioning of this committee that is not necessary. Your attention has already been obtained, and we are grateful for that.

I am also grateful for the Washington congressional delegation which spoke prior to Mr. Robinson and I, and I am concerned about being redundant in the sense that they were so able to state the question so ably in support of Senate Bill 649.

But that is not to say that we are not suffering from some drama in the Oroville-Tonasket Irrigation District. We have gone from a dilapidated and antiquated flume and open canal system at $40 per acre to a state-of-the-art, buried pipeline, fully pressurized system at a cost of $80 per acre, which is expected to exceed $100 per acre when completed, that cannot deliver water. There is an irony or an incongruity in there somewhere, and that is why we are here.

The drama for the district which I want to speak on behalf of today—the district being the legal entity which is responsible for seeing that the water necessary to support the orchard and pear and apple industry in north central Washington is able to function as it should.

And the drama takes the form that we used to conduct monthly meetings with one or two members out of a 611 member water user system, very businesslike, to meetings that are attended by a vigilante, watch dog committee of 40 to 50 with town meetings of 100 to 300 members crying "or blood."

I am also concerned as legal counsel for the district because some of the more vocal members have retained legal counsel to advise them independently of the district, and we are obviously concerned about that. We are embarrassed about that. It was our obligation to see that this water was delivered to the water users. We represented to them that it would be delivered in a better condition than it was in the old system, and instead we have failed in that. It is embarrassing to us as directors and to me personally as legal counsel that other legal counsel is being employed independently from me in this regard.

That is why we are here. We are asking for your help.

We are not happy to be here asking for more government money. We are as interested as any taxpayer, and see that the taxpayers' money is spent in a wise manner. So, again, we are embarrassed to have to be here asking for what may appear to be a handout when what we are really asking for is completion of the contract that we originally entered into.

I would like to end with a quote from the play 1776, which is in our written material submission, in which General Washington had many unanswered queries to the Continental Congress for pay and provision having gone unanswered, makes the statement, "Is anybody there? Does anybody care?" We know you are here. It is obvious that you care after these hearings today, and we hope that you will support the bill and pass it as expeditiously as possible.

Thank you.

[The prepared statement of Mr. Price follows:]

WRITTEN STATEMENT BY RICHARD B. PRICE

COUNSEL FOR THE OROVILLE-TONASKET IRRIGATION DISTRICT

BEFORE THE SUB-COMMITTEE ON WATER AND POWER

COMMITTEE ON ENERGY AND NATURAL RESOURCES

BILL S-649

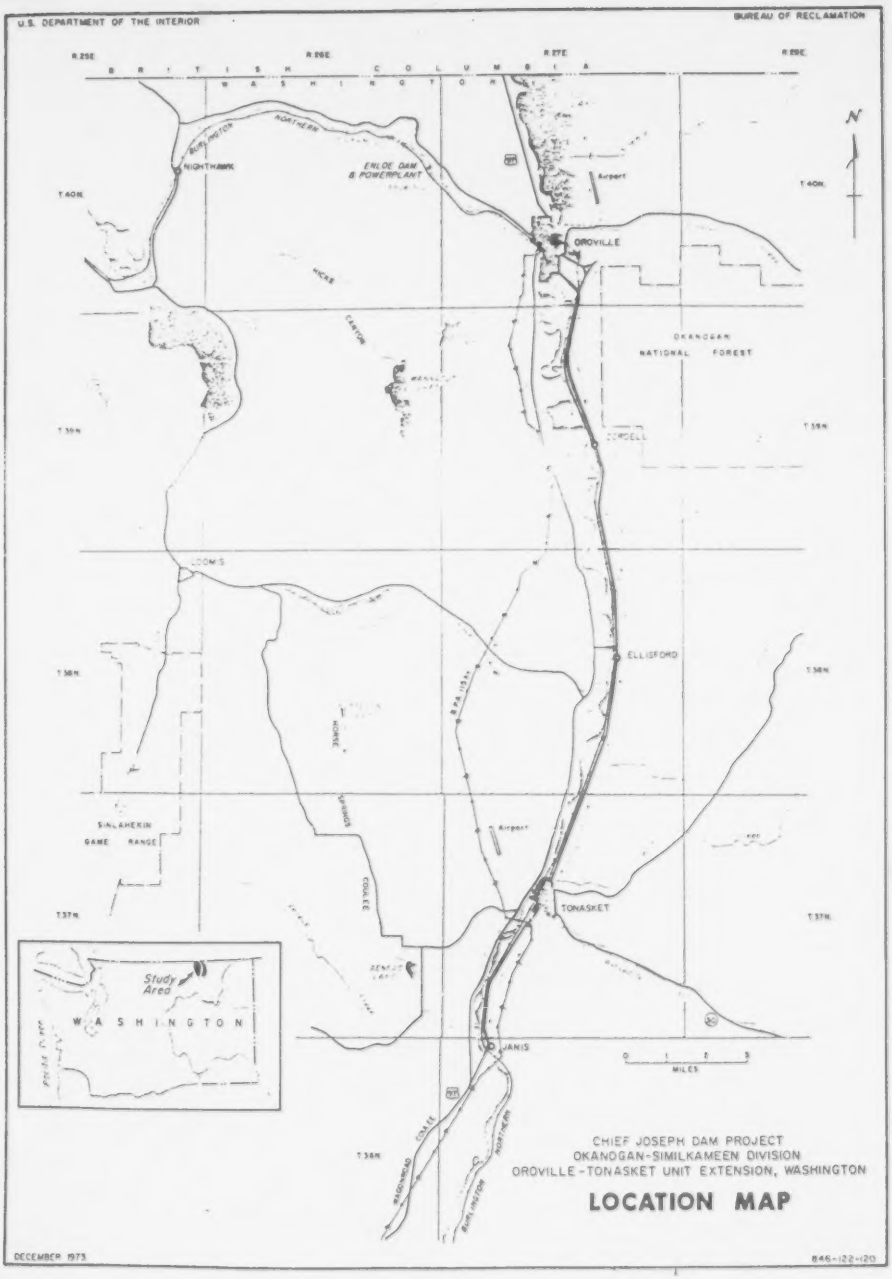
TO AMEND THE RECLAMATION AUTHORIZATION ACT OF 1976

August 5, 1987

OROVILLE-TONASKET UNIT EXTENSION

CHIEF JOSEPH DAM PROJECT

WASHINGTON


U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
BRITISH COLUMBIA
WASHINGTON
R.25E.
R.26E.
R.27E.
R.28E.
T.40N.
T.39N.
T.38N.
T.37N.
T.36N.
NIGHTHAWK
ENLOE DAM & POWERPLANT
OROVILLE
Airport
OKANOGAN NATIONAL FOREST
LOOMIS
ELLISFORD
SINLAHEKIN GAME RANGE
TONASKET
JANIS
Study Area
WASHINGTON
0 1 2 3
MILES
N
CHIEF JOSEPH DAM PROJECT
OKANOGAN-SIMILKAMEEN DIVISION
OROVILLE-TONASKET UNIT EXTENSION, WASHINGTON
LOCATION MAP
DECEMBER 1973
846-122-120

Congress, in authorizing Public Law 94-423 in September of 1976, (Reclamation Authorization Act) determined that on a national basis the rehabilitation project had sufficient merit to warrant the expenditure of approximately $39 million of the taxpayers money in order to facilitate the ongoing economic viability of an intensive agricultural area in North Central Washington. The social benefits noted by the government in support of developing this project were to HOLD THE ECONOMIC FABRIC OF NORTH CENTRAL OKANOGAN COUNTY TOGETHER AND TO BRING THE COMMUNITY TOGETHER AS A VIABLE ECONOMIC ENTITY.

Contrary to Congress' intent, this project is on the verge of tearing the water users of Okanogan County and the social fabric of the community apart limb by limb.

The one thing standing between the demise of the Oroville-Tonasket Irrigation water delivery service with the resultant havoc and destruction to be wrought upon the orchard community and salvation -- Bill S-649 which will authorize the additional funds necessary to effectuate the changes to allow the water delivery system to function.

Pure and simple, the problem is that the newly constructed system, as designed and constructed, is incapable of delivering water free enough of water quality deficiencies such as silt, sand and vegetative particulates to be utilized in a pressurized pipeline sprinkler irrigation system.

79-665 0 - 88 - 3

The alternatives for relief are straight forward:

1. The Bureau of Reclamation obtain sufficient additional funding to implement the redesign changes which it now has determined are necessary in order that the required water quality can be delivered through the system.

or

2. The District file suit against the Bureau and the United States for authorization to terminate the Bureau's construction activities and for damages sufficient to employ private independent engineers and contractors to redesign and reconstruct the water delivery system to meet the specifications originally agreed upon by the United States pursuant to the repayment contract.

or

3. Abandon operation of the irrigation district and allow the property owners to seek recovery for the loss of their orchard and agricultural lands and their livelihood through individual or class suits against the United States.

The last alternative is not a scare tactic but rather a deliberate and reasoned analysis of the consequences which will occur if the additional funding necessary to place the project in an operable operating situation is not achieved.

Because this problem has been with the District for a number of years now and because it has been addressed well in other correspondence and communication, I am providing an appendix of items that may be helpful. The appendix includes communication detailing some of the background and the problems. The appendix contains correspondence indicating the seriousness of the water users in obtaining relief by contacting legal counsel to seek recourse against the United States, on their own, if the District is not successful in bringing this project to a successful conclusion.

We, at the District, trust and are hopeful that this body which found this project to be of substative merit and of great social significance for an otherwise chronically economic depressed area in the first instance warrants your support for the additional funding necessary to bring this project to a successful conclusion. It would be a cruel hoax indeed for the water users who have now doubled their annual assessment in order to meet the increased costs of an updated modern pressurized delivery system to learn that the system can't meet the needs that

were previously being served by a seventy year old dilapidated gravity flow project.

It is not just the landowners in the 10,000 acre Oroville-Tonasket irrigation project that deserve a properly completed project but rather all of the taxpayers of this country whose hard earned money has been spent with the idea of maintaining this region of the State of Washington as an economically viable community to the benefit of all citizens. They too are entitled to the successful completion of a project so that they can realize upon their investment through a viable economic base from which taxes will flow back to them in years to come.

Dated this 29th day of July, 1987.

Respectfully submitted,

RICHARD B. PRICE, Counsel
for the Oroville-Tonasket
Irrigation District

APPENDIX

Appendix No.	
1	Letter from Oroville-Tonasket Counsel, Richard Price to Bureau of Reclamation Regional Director, Bill Lloyd expressing serious concerns regarding water quality, dated December 16, 1985.
2	Letter from the Oroville-Tonasket District Board addressed to Senator Slade Gorton, dated June 6, 1986 setting forth some background of the rehabilitation project and the seriousness of the problems being experienced as a result of the inoperability of the newly constructed system.
3	Letter from Counsel, Richard Price to Harold McDowell, Regional Engineer, dated August 7, 1986 noting the Bureau's acknowledgement of the seriousness of the problem and intitial steps to try and address the situation.
4	A listing of but a few of the problems exerienced by the system broken down by schedule. This list was presented to Honorable Representative Sid Morrisson.
5	A letter from Regional Director, John Keys, III, to Richard Price, as counsel for the Oroville-Tonasket Irrigation District acknowledging need for "correction of the sediment problem".
6	Memorandum from the Project Construction Engineer in Oroville to the Regional Director in Boise, dated October 17, 1986 with an excellent background and overview of the problems experienced as a result of the system's inability to deliver usable water in the pressurized system. This Memorandum was used as support for establishing a claims procedure for the acknowledged damages accruing to the water users. The first paragraph of "conclusions:" on page 10 sums up a substantial portion of the problem.

7 Taskorder specifications by the Bureau of Reclamation for an independent architect-engineer review of the design in order to identify the areas necessary to address to relieve the water deficiency problems.

8 Letter from Honorable Senatory Brock Adams to Oroville-Tonasket Irrigation District, dated February 23, 1987, acknowledging the Bureau's admission of design flaws in the project resulting in damage to the District irrigators on-farm systems.

9 Letter from John Keys, III, Regional Director of the Bureau of Reclamation to Don Thompson, Manager of the Oroville-Tonasket Irrigation District, dated June 5, 1987

10 Proposed Resolution of the Board of Directors of the Oroville-Tonasket Irrigation District authorizing employment of independent engineering expertise to seek outside assistance for redress and relief by employing outside engineer firm and new contractors to redesign and reconstruct the project in order to allow the District to achieve a water delivery system capable of delivering acceptable water at an economically feasible rate. (This resolution was not acted upon pending additional funding to allow the Bureau to address the problems.)

11 Letter from law firm of Jardine, Foreman & Appel addressed to Regional Engineer Harold McDowell indicating the employment of independent counsel by water users with the very real possibility of litigation against the United States Government, the Bureau and the District unless appropriate remedies are achieved by way of additional funding.

December 16, 1985

0.1 file

Rehab project

B.O.R.
Boise

Attn: Bill Lloyd

Re: Water Quality (or lack thereof)

Dear Bill:

The Board is once again approaching the breaking point in terms of water user complaints relating to the high level of sediment in the delivered water.

In one form or another or from one source or another Schedule I and II from their outset have been plagued with contamination from construction debris, sand, gravel, rocks and vegetable matter.

The manifestation of these various forms of contamination range from no more than a nuisance and inconvenience to the serious consequence of:

(1) Uncontrollable pressure at the farmer's valve caused by plugged PRV's

(2) Cut out sprinkler nozzles

(3) Plugged lines

(4) Broken lines

Instead of a more reliable and efficient water delivery system, the growers are complaining of unsatisfactory delivery which is costing them more time and money than under the old system. The problem is compounded when you recognize that the growers are being asked to pay substantially more for the new system and getting less!

The Board stongly believes it is counterproductive for the Bureau, the District, and the Users to have this situation continue unresolved any longer.

Specifically the District needs definitive action from the Bureau as follows:

(2) Implementation of design of recommended changes necessary to deliver clean irrigation water by the start of the 1986 irrigation season.

(3) Implementation of a back-up program to be operational at the commencement of the 1986 irrigation season in the event:

(a) The Leval Separators are not effective

(b) The Bonaparte river screen bubbler system is ineffective in removing vegetation milfoil.

The District needs your help, Bill. It's hard to sell an expensive system that is not performing as represented by the Bureau. It's costing the water users money they don't have.

To quote from a line from a great play "1776," in which General Washington sends yet another courier to Continental Congress pleading for money and provisions for his beleagered army at Valley Forge:

"Is anybody there - Does anybody care?"

Very truly yours,

P.S. The temperature here is about that reported while Washington was at Valley Forge!

June 6, 1986

Honorable Slade Gorton
Senator
208 Cannon House Office Building
Washington, DC 20515

RE: Oroville-Tonasket Irrigation District/
Bureau of Reclamation Rehabilitation Project

Dear Mr. Gorton:

The Oroville-Tonasket Irrigation District is nearing the final stages of a rehabilitation project authorized by Congress under the act of September 28, 1976 (90 Stat. 1325). The purpose of the rehabilitation project was to convert the 70 year old gravity flow water delivery system consisting of delapidated canals and wooden flumes to a modern buried pipeline system capable of delivering clean water under pressure thereby affording a reliable source of irrigation for the intensive agricultural pursuits in the northern Okanogan County area.

Actual construction was initiated in 1980. The project was to be built in three segments denominated as Schedules 1, 2 and 3 respectively. The United States Bureau of Reclamation undertook to design and construct the new water delivery system the sole purpose of which was to provide a reliable water delivery system capable of delivering "clean" water under a minimum of 40 pounds of pressure to every individual turn-out (property owner be it orchardist, alfalfa, or other pursuit).

From the outset of construction, there have been substantial delays by virtue of the Bureau's unwillingness to write the contract documents calling for intermediate completion dates. The result is that contractors have been allowed to delay until near the end of the scheduled completion, only to find out that they cannot complete the project on time, thereby delaying the completion of the overall project by a number of years.

The Board of Directors of the Oroville-Tonasket Irrigation District has continued to voice its concerns to the Bureau at almost every monthly meeting requesting that the Bureau be more specific in the writing of the contracts so as to keep better control over the contractors, and insisting that the contractors work meet the standards called for in the contract.

Various deficiencies in the construction work itself is now reaching the point where the District may be unable to meet its obligations to deliver water at all. An example of the myriad of problems facing the Board in terms of trying to provide an adequate water delivery system is contained in a special meeting agenda dated June 4, 1986, a copy of which is attached hereto for your reference. That special meeting was necessitated by virtue of the fact that many of the items on that agenda have been pending and raised by the District for over two years now without the matters being satisfactorily addressed by the Bureau of Reclamation.

Even though, from the outset of the request for authorization of the Rehabilitation Project, and during the design prior to construction, the Board continually stressed to the Bureau its concerns about a design that would provide the delivery of the clean water, it now turns out that the design is totally inadequate in that regard.

For the last two years water in Schedule I and now Schedule II is so contaminated with vegetation, sand, silt, rocks, and other debris that many of the orchardists are abandoning the District's water delivery system and returning to either private wells on their property or going directly to the river and putting in their own pumps in order to get adequate water for their orchards and land. Many of the individual water users are literally having to stand at their screens and clean their systems hour by hour in order to get any water to pass through their systems at all. The idea that at the end of a 50 million dollar construction project that the water users would have to revert to their own private water delivery systems employed 70 years ago is incomprehensible.

The fact that the cost of the operation and maintenance of trying to operate the new system have increased from approximately $50 an acre to $100 an acre, while at the same time the orchardists are unable to get water that is usable in their individual sprinkler systems, has many of the water users on the verge of revolt. What direction the agitation and consternation of the water users will take either in terms of

unwillingness to pay assessments or the bringing of legal action against the Bureau and/or District or other action detrimental to the physical system presently in place, remains to be seen. What the Board does know is that it cannot accept the continued delay of the Bureau in its failure to address and provide relief from the problems facing the District.

Even though the project engineer for the Bureau and many of his staff are taking the brunt of the District's, the growers, and the water user's frustration, the delays between their requests for design changes to address the problems and any meaningful action, renders their concerns and sympathy for the plight of the District inadequate. The Board is now faced with the dilemma of how to get the Bureau of Reclamation to provide intermediate relief by installing additional filters, strainers, larger settling reservoirs, or whatever it takes to clean up the water to the point where it is usable and can be passed through the individual water user's irrigation systems.

The Board has asked its legal counsel to look into and review the feasibility and practicality of bringing legal action against the United States Government and the Bureau of Reclamation in order to require it to specifically comply with its contractual obligations to construct a water system capable of delivering clean water that is capable of being utilized through the grower's irrigation systems. Because that process, even if instituted by the District, can be lengthy and costly for all parties concerned, the Board wants to make one last ditch effort to see if the Bureau cannot be convinced that immediate action has to be taken to institute whatever action is necessary so that we can deliver clean water to our water users this irrigation season.

Had this been the first year of the problem, we would still be willing to work with the Bureau. However, we are into the second year of the problem, and not only is it continuing, but the Bureau indicates that it does not have any answers as to how it is even going to solve the problem by next year.

The Board is asking for your considered intervention on behalf of the District to conduct an inquiry and an investigation on an emergency basis to see if the Bureau cannot be compelled to provide immediate intermediate relief, and within a reasonable period, present a program to address the long term problems in order to meet their contractual commitments to the District and its water users.

The Board, the Manager, and its staff stand ready, willing, and eager to meet with you or any member of your staff or to discuss the matter by telephone at any time.

The Board is aware of the many demands upon your office, and would not make this request of you, but for the fact that we are in a true emergency situation and have limited recourse and resources which can provide meaningful relief. We look forward to your response and assistance.

Very truly yours,

_____

_____

_____

_____

_____

_____
Secretary/Treasurer

SPECIAL MEETING
OROVILLE-TONASKET IRRIGATION
DISTRICT

JUNE 4, 1986

ITEM

1. Dirty Water-May & June ✓
2. Removal of Flumes & Canals ✓ — opinion on district call ☆ Bill Dunlop
3. Drainage-Map of designated areas ✓
4. Mitigation ✓
5. Orifice Plates-Griswold's ✓
6. Placement of Orifice Plates in Direct Burials which now have none. ✓
7. Separators ✓
8. PRV'S ✓
9. Efficiency of Pumps ✓
10. Relift Pumps-Temby, Davis ✓ — V&K will work on it!
11. Schedule III Completion — Pump pumping plant will not be completed until start of season
12. Schedule III Turnouts — D.O.R. will be responsible for paying assessable costs to keep old system going until service is on line.
13. Other

→ Well mile, with a cost of 90-150

RICHARD B. PRICE
A PROFESSIONAL SERVICES CORPORATION, P.S.
ATTORNEY AND COUNSELOR AT LAW
435 MAPLE STREET • POST OFFICE BOX 1687
OMAK, WASHINGTON 98841
509 / 826-5110

August 7, 1986

Mr. Harold McDowell
Regional Engineer, TN-200
P. O. Box 043
Boise, ID 83724

Re: Oroville-Tonasket Irrigation District
Rehabilitation Project

Dear Mr. McDowell (Harold):

At the outset, let me commend you as well as your designers and support staff for having the courage to face off with the water users of the District.

By whatever means, be it through water user action, the Board of Directors demand and/or the good offices of Senator Gorton and Congressman Morrison's office, it appears we do now have, for the first time in my opinion, the very real attention of the people who are at the root of the problem and who are going to have to solve the problem, the design staff from Denver.

Now that the euphoria of not having been bodily tossed out of the building has worn off comes the hard part. The hard part being that good intentions will no longer suffice and only performance will be accepted.

The water users want and are entitled to relief be it bandaid or otherwise for the remainder of the 1986 irrigation season. In addition, they want acceptable water in order to operate their irrigation system by the start of the 1987 irrigation season and thereafter. As we are all painfully aware at this point, that is going to entail some immediate bandaid programs until the intermediate and finally long term solutions can be put into place. As I understand it, based on our meeting, the Bureau is prepared to, at the very least, embark upon the following program, to-wit:

1. A designer from Denver will be permanently stationed in Oroville for at least one month or more and will work directly with the Bureau personnel as well as with the Oroville-Tonasket Irrigation District personnel with on the spot

day-to-day and night-to-night inspections of the problems as they occur as well as develop an overall and comprehensive grasp of the enormity and magnitude of the situation.

2. Within 60 to 90 days, the Bureau will submit to the project engineer's office, as well as to the Oroville-Tonasket Irrigation District, copies of alternative long range solutions including short term and intermediate bandaid programs to be incorporated to see us through to the long term solutions.

3. The Bureau will consider and make a determination as to the need for the procurement of an outside engineering consultant or consultants in order to review the problems, review the design and assist in the necessary development of alternative solutions.

4. The Bureau will seek funding, emergency if necessary, to facilitate the intermediate bandaid solutions as well as funding the long term alternatives.

5. With respect to the long term alternatives, the Bureau will address its solutions to the river locations in order to achieve, through settling reservoirs, redesign of pumping plants or whatever, water quality that will be sufficient for the individual water users irrigation systems to operate in a reasonable manner.

6. With respect to funding, I believe that Dick Ellis from Senator Gorton's office made a sterling suggestion to the effect that you contact his office now and begin paving the way for what could be a difficult funding request down the road. I must reiterate, at this point, that the Bureau's closed mouth attitude and secretative attitude in trying to address problems without the involvement of the District, its water users and/or our state's congressional staff must cease and desist once and for all. We are all in this together and the sooner the Bureau realizes that the better off we would all be. The idea of designing and implementing bandaid procedures without our knowledge and then informing us that they don't work after they have failed seems to be a negative approach. We are looking forward to a new era of design proposals and review in conjuction with all interested parties to solve the problems.

7. One of the most important bandaid procedures of all, which needs to be implemented immediately, is a claims filing procedure for water users by which water users can submit

claims for unreasonable damage, wear and tear or destruction of various parts of their irrigation systems in order that they might afford the necessary replacements to keep their systems operating until the cure is at hand. I must reiterate that I am not talking about tort claims procedure but rather a local program funded by monies currently authorized for the rehabilitation project. I view the type of claims which were presented to you during the meeting as being no different than the burning out of our pumps and the Bureau's paying for the repair of those. I am not suggesting that we pave the way to privately fund orchardists during hard economic times. I am proposing a stringent claims filing procedure designed by the Board in conjunction with the Bureau to insure that only proper claims are submitted and that only certain limited areas for property damage and necessary replacement parts be authorized. I believe the good will that would be engendered through the Bureau's recognition of the water user's plight in this fashion would be invaluable to the Bureau in terms of the long term costs of this project.

Harold, the Board of Directs and the Secretary/Manager and his staff are committed to achieving construction of a proper and adequate water distribution system which the District can afford to maintain and operate at a rate that will not bankrupt the water users.

Congress, by authorizing this project, determined that on a national basis it had sufficient merit to warrant the expenditure of a large sum of tax payers' money in order to facilitate the ongoing economic viability of North Central Washington. In reviewing the feasibility study and the defininte plan report, I find that the social benefits noted by the Government in support of developing this project, were to hold the economic fabric of North Central Washington together and to bring the community together as a viable economic entity. Contrary to Congress' intent, this project is on the verge of tearing the water users of North Central Washington and the social fabric of the community apart limb by limb. Changes must be implemented now!

I hope you are convinced that the District, on behalf of the water users, is committed to seeing that this project is completed and that final project is one that will operate adequately. Whether you allow another Teton Dam disaster to occur is now, squarely in your hands!

Very truly yours,

LAW OFFICES OF RICHARD B. PRICE, P.S.

Richard B. Price

RBP:cm
cc: Honorable Slade Gorton
Representative Sid Morrison
Don Thompson
Harvey Dickensheets
John Keyes

EROSION PROBLEMS

CO-2 - 2199	Seats and Poppets
CO Mainline	Max Hand - PRV
CO-2 - 3823	Worn Badly
CO-1 2410 CO-2F - 1265	Bad 2" Valve
Schedule I	PRV at Booster Pumps Plumbed Wrong
TK-3 - 3218	Worn Poppet
EL-6A - 1055	Worn Poppet
EL-6 - 1721	Miller - Bad Farmer Valve
TK-8	Homer McCallum - Farmer Valve
EL-9	Simon - Farmers Valve
EL-4	Richard Nicholson - 6" Farm Valve

HIGH PRESSURE LINE BREAKS

George Mathes	EL-3
Jim Edwards	EL Mainline
Tonasket Orchards	TK-4
Pine Creek Orchards	BP Relift
H S & T	CO-3B
Lesamiz	CL-2
Bid Red	CO-2
J. P. Larrabee	CO-2
Taber & Clark	EL-9

PRV Screen Plugs - Poppet Opens = Line Pressure

SCHEDULE III

We will have to Change PRV's - Too Large

All PRV's will "Motor Boat" at Low Flow (BURNAD)

ter A. Law
te 1 Box 15
asket, Wa. 98855

Oroville, Washington
March 6, 1978

Mr. Lynn Isaacson, Resident Engineer
U.S. Bureau of Reclamation
P.O. Box 929
Oroville, Washington 98844

Dear Mr. Isaacson;

As a grower and water user in the Oroville-Tonasket Irrigation District, I would like to emphasize the need for clean water to keep our irrigation sprinklers running consistantly, and to cut down on wear that causes frequent nozzle replacement in our sprinkler heads. For under tree nozzle replacement the cost can run as high as $15.00 per acre each year. For overhead sprinklers the labor time in replacement costs add up much higher when the sprinkler nozzles are twelve to fifteen feet high.

As you are aware, our river water has a high turbidity. We urge your influence with the design engineers to provide the necessary means to secure clean water for our new irrigation project.

Very truly yours;

Walter A. Law

...llop Wn.
...14

March. 12, 1978

R. Lynn Isaacson,
esident Engineer
S. Bureau of Reclamation
O. Box 929
Deville, Wa. 98844.

Dear Mr. Isaacson;

As a grower and water user in the Oroville-Tonasket Irrigation District, I would like to mention some of the problems caused by having dirty water.
First it is very costly, it runs between $100.00 to $150 per acre each years replacing sprinkler parts. It gets so bad it plugs my screens three four time daily, when that happens you get behind in good water coverages.
Dirty water is costly in repairs to all irrigation pumps also.

We urge your influence with the design engineers to provide the necessary means to secure clean water for our new irrigation project

Very Truly Yours
Stanley W. Nelson

SCHEDULE I

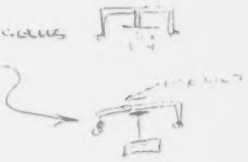
NAME	LOCATION	PROBLEM
Don Dixon	CO-1-20+38	PRV
Duane Ward	CO-1-35+34 CO-1-37+82	Varied pressure
G. Reese	CO-1-46+06 CO-1-42+16	Varied pressure
J. P. Larrabee	CO-2-71+94	Too much pressure
Earl Perkins	CO-2-81+69	Still gets sand and a few rocks
Dennis Pickering	CO-2F-12+65	Too much pressure - eats up valves
Riverside Orchards	CO-2I-13+74	Varied pressure
R. E. Roloff	CL-1-20+77 CO-1-23+47	Too much pressure - can irrigate whole orchards in 3 days - 2 direct bury
Terry Bower	CL-1A-14+09	Too much pressure - 6"
Su-Dan	CL-2-41+29	Excessive silt problems
Bill Godwin	CL-2-42+36	Everything possible is wrong
Dan Tibbs	CL-2-51+15	Varied pressure

SILT RELATED PROBLEMS

PRV CLEANED 3-4 TIMES 1975

PARKER PRV BONNETS CLEAN THINGLEES
" " " DUST "

2 3/4 PRV BONNETS CRACKED
ALL PRV SHOW EROSION



SCHEDULE II

NAME	LOCATION	PROBLEM
James Edwards	EL-12+79	Too much pressure and silt and sand
Ed Lindquist	EL-16+83	Pressure & PRV failure
Walt Kelley	EL-20+82	PRV creeping pressure and silt
Earl Freels	EL-25+57	Too much pressure and rocks
Frank Cline	EL-26+88	Too much pressure
Jeff Bergh	EL-6B-10+50	Creeping pressure, silt and sand
Pat McDonald	EL-9-33+41	Not enough water or pressure in hot summer irrigation season
Sam Walker	BP-2-48+37	Varied pressure and sand
Robert Schertenlieb	BP-2-52+81	Sand
Fred Maple	BP-2-54+71	Sand
John Larson	BP-2-58+42	Varied pressure and sand
Jim Johnson	BP-2-63+75	Sand and rocks and PRV
Leland Robinson	BP-2-63+95	Sand
Clair Fisher) Jim Johnson) Guy Fisher)	BP-2-67+38	Sand and silt
Vada Hughes	BP-4-16+30	Combined turnout - excessive pressure
Robert Swager	BP-4-44+82	PRV problems, silt and rocks
Richard Temby	TK-25+40	Booster plant problems
Tonasket Orchards	TK-4-10+98	Excessive pressure - direct bury
L. P. Holmes	TK-8-15+08	Lack of water - too small PR
Tom Corum	TK-8-32+97	Excessive pressure
Charles McCallum	TK-8-23+60	PRV problems - always under water
Rolly Morrison	TK-8A-17+03	Booster plant problems

Joan Kraft - District Representative, Representative Sid Morrison

Richard Ellis - District Representative, Senator Slade Gorton

UNITED STATES BUREAU OF RECLAMATION - DENVER

Walt Long - Design Section

Jim Warden - Design Section

Glen Reckit - Design Section

UNITED STATES BUREAU OF RECLAMATION - BOISE

Harold McDowell - Design Section

Harry Menzel - Finance Section

UNITED STATES BUREAU OF RECLAMATION - OROVILLE

Lynn Isaacson - Office Engineer

Joe Perry - Field Engineer

Leonard Svetich - Engineering Technician

OROVILE-TONASKET IRRIGATION DISTRICT

Leland Robinson - Chairman of the Board

Perry Blackler - Board Member

John Verbeck - Board Member

LaRee Felt - Board Member

Clifford Bensing - Board Member

Richard Price - Attorney for District

Donald Thompson - Secretary/Manager

AREA GROWERS

Walter Kelley

Walter Law

Stanley Nelson

Ralph Longanecker

O.T.I.D. Sent resolution to BOR - June 18, 1985 - requesting action on debris

July 24, 25, 1985 - Boise - Denver - BOR inspection

Promised "IMMEDIATE ACTION":

1. Schedule I and II Reservoir Inlet-Outlet Change
2. Self-Cleaning PRV Screens
3. Additional Small PRV for Turnouts
4. "V" Port Restrictors
5. 48" Cans for Direct Burial Orifice Installation

Promised "LONG RANGE CHANGES":

1. River Pump Separator Test
2. Electronic Flow Meter or Pitot at each Turnout
3. Increased Blow-Off Capacity
4. Rip-Rap and Screen Protectors at River Plants
5. Modify TK Plant and Install Screens
6. Second Discharge Lines to Tanks

Schedule I Modification of Deficiencies Required:

1. Oversize PRV's - Cavitation
2. How are We to Remove Silt from Reservoirs and Tanks
3. River Separator Inefficient
4. Orifice Plate Just a Stop-Gap - Need Flow Control
5. Separator Ball Valves and Piping Eroding
6. Separator Pinch Valve Not Operating Properly
7. Air Compressors on Surge Tank Plumbed Wrong (Unloader Problem)
8. PRV Pilot Screens Plug - Line Pressure Blows Grower Lines
9. Relift and Booster Pump Sand Wear Excessive

79-665 O - 88 - 4

Schedule II:

1. PRV Oversize
2. Silt, Sand, Vegetation in Pumpage -- PRV go to Line Pressure
3. Faulty Farm Valves
4. 18" to 24" Silt in TK Tank in Fall
5. One Man Constantly Required on PRV Cleaning
6. 12" Separator Valve - One Froze, Possibly More

OVERALL PROBLEMS:

1. Kit-San Behind Schedule -- Old System - One More Year
2. Four River Pump Failures (Motor Problems)
3. Tanks and Reservoirs Too Small
4. Not Enough PRV's Furnished

JUNE 20 Meeting with Sid Morrison Seeking Help

RECEIVED
OCT 16 1986

United States Department of the Interior

BUREAU OF RECLAMATION
PACIFIC NORTHWEST REGION
FEDERAL BUILDING & U.S. COURTHOUSE
BOX 043-550 WEST FORT STREET
BOISE, IDAHO 83724

IN REPLY REFER TO: PN-200

OCT 14 1986

Richard B. Price
Attorney and Counselor at Law
435 Maple Street
P.O. Box 1687
Omak, Washington 98841

Subject: Oroville-Tonasket Irrigation District Rehabilitation Project
(your letter dated September 15, 1986)

Dear Mr. Price:

As you are probably aware, representatives from this office and our Denver office will meet with you and the Oroville-Tonasket Irrigation District board on October 16, 1986, to present several alternative designs for correction of the sediment problem. Other items for discussion will be the interim modifications we plan to make prior to the 1987 irrigation season. Assuming successful passage of legislation to increase the Project cost ceiling, all modifications to the systems should be completed by the 1988 irrigation season.

We recognize your desire to proceed with the low head pumps and desilting ponds, however, we believe it is necessary to complete feasibility designs and cost estimates on all alternatives being considered prior to selection of a plan to implement. Completion of these feasibility designs and estimates will not delay the overall program.

Should we decide to have the designs reviewed by a consultant, we would use the architect-engineer we presently have under contract.

We are proceeding as quickly as possible, but any major modification cannot be initiated until legislation increasing the cost ceiling has been enacted.

Sincerely yours,

John W. Keys, III

Regional Director

cc: Oroville-Tonasket Irrigation District
Assistant Commissioner - Engineering & Research
Attn: D-272
Project Construction Engineer, Oroville, Washington

United States Department of the Interior
BUREAU OF RECLAMATION
OROVILLE-TONASKET CONSTRUCTION OFFICE
P.O. BOX 929
OROVILLE, WASHINGTON 98844

OCT 17 1985

IN REPLY REFER TO:

Memorandum

To: Regional Director, Boise, Idaho

From: Project Construction Engineer, Oroville, Washington

Subject: Report on Damage to On-Farm Pressure Irrigation Systems - Schedules I and II Oroville-Tonasket Irrigation Project

BACKGROUND

Construction of Schedules I and II of the Oroville-Tonasket Irrigation Project has been completed. On-farm losses have been alleged, resulting from the functioning of the system due to the quality of water delivered to the water users. The water quality deficiencies including silt, sand and vegetative particulates have reportedly been costly to the users; and have created negative feelings toward the Bureau and the overall project.

This report includes background of the construction project, losses resulting from the sand, silt and vegetative matter, and outlines anticipated users claims issues.

The Oroville-Tonasket Irrigation District rehabilitation and betterment project, authorized by P.L. 94-423, dated September 28, 1976, replaces a gravity irrigation canal and flume system with an enclosed pressurized pipe system. This pressure system is fed from five Okanogan River pumping plants and one pumping plant on Lake Osoyoos.

Progressing down the Okanogan River below Lake Osoyoos, pumping plants in order are: Cordell, (mile 8), Crater Lakes (mile 9), Ellisforde, (mile 12), Tonasket (mile 14), and Bonaparte (mile 19). The first two were built under Schedule 1 and the next three under Schedule II. (Schedule III, not involved in this report, includes the Lake Osoyoos pumping plant still under construction).

Schedule I delivers water from two pumping plants into two reservoirs, from which it is then distributed through pipelines further connected to on-farm private systems. In contrast, Schedule II water is fed directly from the Ellisforde and Bonaparte pumping plants discharge lines into the distribution pipe networks without going into their regulating reservoirs. The Tonasket system has separate discharge lines to its regulating tank.

1984 OPERATIONS

Schedule I water was made available to users in 1984. Initial major complaints about malfunctions because of debris, rocks and sand were corrected during 1984 by a thorough flushing of the pipelines. Bureau engineers determined that the majority of this debris was left in the pipeline during construction.

1985 OPERATIONS

Plugged on-farm water user filters and pressure regulating valve (PRV) failures were, however, still occurring in 1985, especially during the

spring run-off when river sediment was high.

In the spring of 1985 water was delivered to Schedule II users. Rocks and debris were only occasional causes of complaints; but complaints about sand, silt and vegetative matter were common.

1986 OPERATIONS

Spring run-off river levels were higher in 1986 as were on-farm system problems for users served by Schedule II plants. A few selected trouble spots were helped by installation of additional mainline and on-farm user filtration; but, the problems were common to most users of this section. Self cleaning screens were also installed in the PRV's in an effort to alleviate this problem.

Prior to the 1986 irrigation season, modifications were made by the Bureau to the reservoirs on Schedule I to settle more heavy particles out prior to water entering into the distribution system. Finer mesh screens were added to screen out the organic material. Measurements taken after 3 months operation (July 1986) indicated that approximately 350 cubic yards of sand and silt had been kept out of the pipe system by this method. Schedule I water-user complaints in 1986 were reduced to a few.

POTENTIAL WATER-USER CLAIMS

Potential complaints that may result in claims from water users all have a common element; the presence of foreign material in the water.

Sand and silt and vegetative particles have caused pressure regulator failures in three ways. (1) The most common complaint is plugging of on-farm regulator pilot valves, which in turn causes them to allow passage of full-line (in excess of 150 psi) pressure to the user's systems which are designed to operate at regulated pressures of 45 to 60 psi. (2) When water usage is low the pressure regulator seat is eroded by high velocity sand-laden water and becomes unable to close completely. This too allows excessive full-line pressure in the user's system. (3) The pressure regulator fills with sand and silt and the regulator does not open. In this mode, little or no water is delivered unless erosion allows leakage through the regulator.

Excessive pressures cause accentuated wear on user valves and sprinklers and compound erosion damage from sand and silt. Concentrated streams of abrasive high pressure water from undertree sprinklers are apt to scar the skin or bruise tree fruit. Most common and most expensive damage from overpressure is the rupture of buried lines and fittings. PVC pipe systems which may have been adequate for use under controlled pressure conditions could fail under increased pressure either because of exceeding the strength of the low pressure rated pipe or because questionable installation techniques were used. Common practice in the Oroville-Tonasket area has been to use 125 psi PVC pipe for farmer's mainlines with 160 psi or higher ratings on smaller lateral lines. Over pressure ruptures would be most likely to occur with user pipes larger than 1 or 2 inch diameter since construction economics could have been great enough to dictate the use of lower-rated pipe. Also, smaller diameter pipes and fittings are more apt to be properly glued than are the larger

diameter ones. Smaller size pipes are easier to glue because of the quick setting characteristics of the solvents used to join PVC pipe joints. This is greatly accelerated during warm weather.

The Oroville-Tonasket Irrigation District installs connections between the Bureau system and the user's system. After all of Schedule I and 25% of Schedule II connections had been made, the possibility of rupture of 125 psi rated pipe became apparent. The O.T.I.D. then switched to 160 psi pipe connections in an effort to minimize this problem.

Some of the older on-farm systems have used thin-walled steel pipe. Some of these were barely adequate to handle carefully controlled pressure. Corrosion and/or overpressure may necessitate a premature replacement of entire on-farm mainlines.

Neither PVC nor steel pipeline systems have protection against water hammer induced pressures. Very careful filling of systems is required to avoid this problem. Also, the pressure regulator response time has to be slowed drastically so that rapid off-on transitions are not possible. The usual way to slow response is to set needle valves on regulator pilot valves to extremely small openings. As these settings are reduced, very clean water is needed to avoid plugging the needle valve opening. The water quality being delivered appears to be inconsistent with this method of controlling water hammer.

WATER QUALITY

Water user expectations for "clean" water appears to be based in part on preliminary system design proposals and partly on experience with the canal-flume system which was to be modernized under the rehabilitation and betterment project.

A letter was sent to water users by the Oroville-Tonasket Irrigation District Board of Directors in January of 1979. Part of this letter reads:

> "The proposed design of these river pumping plants will be of the Gallery Infiltration type. There will be rock gravel filters constructed in the river with manifold pipe gallery collecting the filtered water and diverting it to vertical turbine pumps. A backwash system will be built into each of these four (sic) plants to scour the filter medium during periods when the river water is extremely turbid."
>
> "Only one of the six pumping plant sites that were core drilled for determination of foundation material showed good gravels below the river bed. This site which is in the Tonasket area, will probably be suitable to construct a well-type plant, which would have the advantage of filtered water, no fish screening problems, and would be less expensive to construct."

Under the old system, each user had screens (as fine meshed as he cared to maintain) and a "water box" where some solids could settle out. Also, there were long reaches of canal where solids accumulated for yearly removal by O.T.I.D. Sediments concentration delivered to users were in general very low and depended upon how water was taken from the canal or flume and upon proximity to auxiliary pumps feeding the canal. Two letters were received from Directors of O.T.I.D. in 1978 estimating annual sprinkler parts maintenance costs between $10 and $15 per acre. This level would indicate an expected life between 12 and 18 years for sprinkler heads, or much longer life with selected parts replacements. One of these letters also made reference to clogged filters possibly concerning floating vegetative material which was common to the open gravity system, especially after wind or rain carried material into the canal.

DRIP SYSTEMS AND MICRO SPRINKLER SYSTEMS

Based on this expectation of similar or better water quality a few users converted their systems to either drip or micro sprinklers. Both drip and micro sprinkler systems require more careful on-farm filtration than was the historical practice. Although successfully operated under the old open canal system, an almost total failure of these systems occurred under the new Schedules I and II systems. Operating times between automatic backflush cycles were less than three minutes in one instance. Some operators hired extra help to spend full time cleaning filters and patrolling orchards for emitters or sprinklers plugged by extraneous material delivered with the water.

The majority of on-farm systems are underground mainlines, small laterals, and impact sprinkler heads with a normal filtration through 1/16 inch diameter screens. The usual nozzle sizes range from 3/32 inch to 9/64 inch. This type system has experienced severe functional problems. Buildup of vegetative material on screens reduces hole size, traps silt and sand and results in plugging within a few hours. Uncertain pressure and time before plugging may leave portions of orchards under-irrigated. This may lead to claims of reduced production and/or of reduced fruit quality.

Another failure mode for on-farm sprinkler systems has resulted from the build-up of silt in lateral lines. This occurs in 3/4 or 1 inch pipe serving the end sprinkler or two on a lateral. If not solidly plugged, periodic removal of the end sprinkler and flushing is productive. Once completely filled however, the solution has been to cut open the pipe, or replace sections or use a compressor to blow out the sediment. Any such corrective measures are labor intensive.

SPRAY EQUIPMENT

Water delivered to users is also used in chemical sprayers as a carrier for the chemicals. Typical spray equipment supplies pressurized liquid to very small nozzles forming a mist that is blown by air blast through orchard trees or is applied directly to foliage by directed spray. Proper application requires careful calibration of pressure and nozzle size. Prudent operation normally requires yearly re-calibration.

There have been reports that the abrasive silt in water has greatly accelerated sprayer pump and nozzle wear. Such complaints of reduced useful life of these components may result in claims against the United States.

POTENTIAL THIRD-PARTY AND OTHER CLAIMS

Equipment and materials purchased by water users is often covered by either expressed or implied warranty. Third-party suppliers may have incurred costs repairing or replacing items that have proven incapable of operating under the rigors of Schedule I or II water quality conditions. If claims are made against the United States by either water users or materials suppliers, it will be critical to determine whether or not items in question would have been expected to be satisfactory given water quality conditions existing under the former canal and flume system and regulated pressures of the new system.

Potential claims for damages could have opportunity for either capital costs or interest costs in addition to the basic system parts damages. These costs would be related to the period of time between corrective action and compensation. Only in extreme cases should a full before and after appraisal of the property be necessary. Less involved cases should be compatible with existing appraisal procedures for construction related damages.

Associated with failures of underground pressurized lines is erosion of surrounding land. Possible damage claims may include hauling in or placing material to refill holes, water damage to structures and contents, and crop or tree damage. It is also conceivable, but not likely, that claims may arise connected with portions of some orchards being unable to weather the period needed to correct water quality and on-farm system deficiencies and thereby suffering long term losses in productivity.

In the event claims are filed against the United States, determination of such will involve judgments based upon type and condition of on-farm system components. Appended are estimated prices for parts and materials which are anticipated to be the substance of individual claims. These prices are based on our investigation of 1986 price list information normal to the area where replacements are purchased by project water users.

CONCLUSIONS:

But for Bureau of Reclamation's delivery of a quality of water that included excessive quantities of silt, sand, and vegetative particulates, a substantial portion of the complaint of losses would not have occurred. In making a determination as to whether it is appropriate to compensate users for losses resulting from water use, the following is a summary listing of the potential claims outlined in this report:

1. Replacement costs of component parts; and,
2. Labor for replacing component parts; and

3. Replacement of micro-sprinkler-systems installed and in operation at the rate of the standard sprinkler systems; and
4. Reduced production and/or reduced fruit quality; and
5. Claims by third party suppliers for items which would have been considered satisfactory given conditions under the previous system; and
6. Capital costs or interest costs in addition to basic system parts damage, related to the time between corrective action and compensation; and
7. Erosion of land and cost to repair.

We also recommend that a release for future claims or other damage or loss occurring before the date of claims be obtained from the claimant.

SECTION C--DESCRIPTION/SPECIFICATIONS

C.1. APPLICABILITY OF AGREEMENT PROVISIONS

a. General:

In performance of this taskorder, the Architect-Engineer shall comply with all provisions of Indefinite Delivery-Indefinite Quantity Contract No. 5-CS-10-07130, except as otherwise noted herein. The requirements of this task are covered specifically in Para. C.1.2 of the Contract.

b. Scope:

The Bureau of Reclamation has designed and constructed five river-type pumping plants on the Okanogan River near Oroville, Washington. The plants deliver water to closed pipe pressure distribution systems used primarily for sprinkler-type irrigators. The quality of the river water is such that a combination of sand, silt, and organic matter has to be removed from the water before it can be effectively and economically used as a sprinkler system supply. The performance of the removal devices to date has been less than acceptable and the Bureau is in the process of implementing remedial measures to improve the quality of the water delivered.

We require an independent evaluation of our design decisions and the solutions that were applied to the problems identified in order that we can be assured that we have have not misapplied technology or missed any suitable and economical solutions to the problem. We are also developing a group of "long-term options" that would be applied if the present modification program fails short of the intended mark. We will require a review and critique of these options as well as a list of concepts not included but thought to have merit by the A&E.

Specifically, the requirements are as follows:

1. Review of the original design of the river pumping plants with respect to the intake screen system, sump concept, and the separation concept.

2. Review proposed modifications to the pumping plants with respect to the removal of silt/sand and organics.

3. Review the "long-term" solutions already developed by the Bureau and critique the solutions from the standpoint of efficiency, cost effectiveness, and life cycle ow costs.

4. Present any other concepts that the A&E believes to be more efficient and/or cost effective.

5. Six (6) copies of the report containing your findings and recommendations. The report may be a letter-type report, but each copy must contain good quality reproductions of any charts, photos, or illustrations used as support for the A&E's conclusions and

BROCK ADAMS
WASHINGTON

United States Senate

WASHINGTON, D.C. 20510

COMMITTEES:
COMMERCE, SCIENCE AND TRANSPORTATION
FOREIGN RELATIONS
LABOR AND HUMAN RESOURCES
RULES AND ADMINISTRATION

February 23, 1987

Oroville-Tonasket Irrigation
District
PO Box H
Oroville, Washington 98844

Dear Friends:

Thank you for contacting me concerning the problems users of the Oroville-Tonasket Irrigation District are having with their new irrigation system.

I have talked to the Bureau of Reclamation and Congressman Morrison's office about this issue. The Bureau is aware that design flaws in the project have resulted in damage to District irrigator's on-farm system. The Bureau is designing a variety of corrective measures to deal with the sediment problem that caused this damage.

The Bureau told me it is committed to finishing this project. This will require raising the authorization ceiling on the project to include the funds necessary for these corrective procedures, and ensuring that these funds are available. Congressman Morrison is expected to introduce the necessary legislation in the House. I assure you that I will work closely with him, and make every effort to assist him in the Senate.

I appreciate your offer to view the problem personally but because of a tight schedule, I will be unable to do so. I will be staying in close contact with Congressman Morrison's office to follow the problem.

Thank you again for contacting my office, and feel free to get in touch with me again at any time.

Sincerely,

Brock Adams
United States Senator

BA/do

United States Department of the Interior

BUREAU OF RECLAMATION
PACIFIC NORTHWEST REGION
FEDERAL BUILDING & U.S. COURTHOUSE
BOX 043 - 550 WEST FORT STREET
BOISE, IDAHO 83724

IN REPLY REFER TO: PN 100

JUN 5 1987

Mr. Don Thompson, Manager
Oroville-Tonasket Irrigation District
P.O. Box H
Oroville, Washington 98844

Dear Don:

Over the past 2 weeks we have made a lot of decisions concerning the Oroville-Tonasket Irrigation Project and its construction. While I have talked with you several times about the issues, a summary and update are shown below for your information and to share with your Board of Directors:

1. The Bureau of Reclamation is moving forward to develop measures to clean up the O-T Irrigation District water supply to an acceptable level. These measures all center around settling ponds for Schedules I and II pumping plants.

2. A "Value Engineering Team" has been formed to study the various settling/desilting options, and we have asked the team to have a recommehded course of action by mid-July. Team representation will be from the Denver, Boise, and Oroville offices of the Bureau and from the O-T Irrigation District (you). The team will begin its work in Oroville on June 8.

3. Pump problems on Schedule I and II will continue to be addressed. Hopefully the pump manufacturers and contractors will be successful in dealing with bearing, seal, and other problems.

4. Design work on the final approved desilting plan will begin as soon as funding becomes available, hopefully this summer. We will initiate construction on the desilting facilities in 1988 with the actual date of completion of all new features dependent upon the plan/concept developed by the VE team and funding. We believe that we can construct the "pond" portion of any plan in 1988 provided that obtaining R.O.W., environmental clearances, permits, etc., goes smoothly. However, connecting the "ponds" into the existing systems and any required pumping plant modifications could push completion into late 1989 or early 1990. Delivery times on new mechanical and electrical equipment along with having to leave the systems in operation while implementing the modification plan all point toward the possibility of the 1989 or 1990 dates. We will be in a better position to narrow down some of the unknowns in the schedule after the VE team's recommendation has been made and a course of action has been decided upon. It appears that the District, with our assistance, should be prepared to operate the existing systems on Schedules I and II through the 1989 irrigation season.

5. Harvey Dickensheet's reassignment from the Oroville-Tonasket Construction Office to the Regional Office in Boise has been rescheduled from October 1987 to June 1, 1987.

6. During the 2-week period from June 1 to June 15, Harold McDowell (our Regional Engineer) will spend considerable time at the Oroville-Tonasket Irrigation District--working with you and your growers to identify problems to be addressed, working with the Value Engineering Team on the settling ponds, assuring cooperation between the Bureau and the District, etc.

7. On June 15, a three-man management team will report to Oroville to assume supervision of the project and to devote concentrated attention to problems with your system. The team will consist of Neil Stessman, who will be in charge of project management; Virgil Temple, who will work on all aspects of operation and maintenance of the project; and Gary Spangelo, who will be responsible for construction of facilities. This team will be on the project through the irrigation season. We will decide at that time on the level of Bureau staffing that will be needed to complete construction of the project and get it ready to turn over to the District for operation and maintenance.

8. The claims program is not moving as quickly as we had hoped. The Solicitor's office is having to do a lot of bench mark work in preparation for paying the first claims. We expect the first claims to be paid in June, with others to follow quickly after that.

Don, if you have any questions on these actions, please let me know.

Sincerely yours,

John W. Keys, III

John W. Keys, III
Regional Director

COPY

RESOLUTION OF THE BOARD OF DIRECTORS
OF THE OROVILLE-TONASKET IRRIGATION DISTRICT
1987 - _____
* *

BE IT REMEMBERED that the Board of Directors at its regularly scheduled meeting on Tuesday, June 9, 1987, considered the question of the United States Government through the Bureau of Reclamation construction of the intended rehabilitation project,

WITNESSETH:

WHEREAS, the District did determine in the 1970's that its gravity flow water delivery system consisting of flumes, canals and ditches was dilapidated, antiquated and in-adequate to meet the needs of its water users, and

WHEREAS, the District did seek and obtain specific congressional authorization for rehabilitation of its water delivery system to be designed, engineered and constructed by the United States through the Bureau of Reclamation, and

WHEREAS, in connection with said project, the District did, at the outset, raise concerns about the design to handle water sedimentation and vegetation normally found in its main sources of water supply, and

WHEREAS, the District did argue for equalizing reservoirs sufficient to afford several hours of water supply in the event of interuption or disruption of the

water supply, and

WHEREAS, the District and the Bureau entered into a contract whereby the Bureau undertook to design, engineer and construct a pressurized water delivery system that would meet the needs of the water users for irrigation water consistent with the source and water quality available to the District, and

WHEREAS, from the outset of the design and construction of the project, the input, suggestions and requests of the District have been largely ignored, and

WHEREAS, the construction portion of the contract has been mismanaged so as to allow or compell contractors to overrun the completion dates and thereby delay the initial intended completion of the project by several years, and

WHEREAS, engineering specifications among the three different schedules of the project have varied to the point that parts from one portion of the project to the other will not be interchangeable and in addition the operation techniques required at the different pumping stations within the various schedules 1, 2 and 3 will vary markedly and the redundancy built into the system may well be beyond the capability of the District to operate and maintain, and

WHEREAS, the design and construction of the project has been faulty to the point of rendering the

delivery of water totally incompatible with the needs of the water users, and

WHEREAS, a combination of factors of either design and/or supervision in quality control of equipment and materials installed on the project are deficient to the point that the initial intended life expectancy of the system, particularly the pumps, has been substantially decreased thereby creating a situation wherein the anticipated O & M costs for ultimate operation of the District will be far beyond its economic feasibility, and

WHEREAS, these problems have been brought to the Bureau's attention from time to time with repeated assurances by the Bureau personnel that the matters would be corrected, and

WHEREAS, even after congressional intercession last year and promised design changes and emergency measures to be implemented by the Bureau in order to improve the system, the water delivery is worse than 1986, and

WHEREAS, the project is nearing completion with the District facing the prospect of being requested to accept a water delivery system that cannot deliver water and even were it capable of delivering water, the costs to the District would not be affordable by the water users, and

WHEREAS, the extent of the situation is having and will have catastrophic consequences to the continued

economic viability of the District unless these matters and a myriad of other technical matters are addressed and remedied, and

WHEREAS, the threat to the District directly affects the continued viability of the agricultural community in the Oroville, Ellisford and Tonasket regions of Okanogan County. and

WHEREAS, the District no longer believes that the Bureau has the ability to perform its obligations pursuant to the congressional authorization and contractual obligations.

BE IT RESOLVED that the District does hereby direct the manager and the District's attorney to seek appropriate independent engineering expertise for purposes of reviewing the entirety of the rehabilitation project so as to advise the District on specific design and construction inadequacies and to assist the District in seeking appropriate redress and relief in terms of specific performance of the contract by substituting an outside engineering firm and new contractors to redesign and reconstruct the project in order to allow the District to achieve a water delivery system capable of delivering acceptable water and having constructed a water delivery system that is economically feasible for the District to operate and in addition, and for damages suffered by the

District by virtue of the unreasonable delays and expense for the inadequate design and inadequately supervised construction of the project to date.

DATED: _____, 1987.

_____

_____

_____

_____

_____

RECEIVED
SEP 19 1986

LAW OFFICES OF
JARDINE, FOREMAN & APPEL
A PROFESSIONAL SERVICE CORPORATION
2500 SEATTLE TOWER
THIRD AT UNIVERSITY
SEATTLE, WASHINGTON 98101
206 / 625-0650
TELECOPIER 206 / 625-1807

701 NORTH CHELAN STREET
POST OFFICE BOX 3125
WENATCHEE, WASHINGTON 98801
509 / 662-9602

WILLIAM N. APPEL*
MICHAEL A. ARCH
ROLAND J. COLE
DALE M. FOREMAN
WILLIAM J. GLUECK
MATTHEW W. GRANGER
THOMAS E. JANISCH
GARY N. JARDINE*
RUSSELL J. SPEIDEL†
MARK E. STANSFIELD††

OF COUNSEL
HERBERT EDELHERTZ**
WILLIAM H. OSTENSON

*ALSO ADMITTED IN PENNSYLVANIA
†ALSO ADMITTED IN MASSACHUSETTS AND NEW HAMPSHIRE
††ALSO ADMITTED IN IDAHO
**ALSO ADMITTED IN NEW YORK AND DISTRICT OF COLUMBIA

September 18, 1986

Mr. Harold McDowell
Regional Engineer, TN-200
P.O. Box 043
Boise, Idaho 83724

Dear Mr. McDowall:

The purpose of this letter is to advise you that I have been contacted by a number of orchardists who have been adversely impacted by the sand and silt in the irrigation water provided to them through the Bureau's irrigation project.

A meeting has since been held with certain of these orchardists, who have subsequently engaged me to represent them in analyzing their possible remedies and in any discussions betwen the Bureau and the District which may impact solutions or reimbursement for any claims of my clients as a result of orchard equipment damage and other consequential damages caused by silt and/or sand.

Accordingly, there are two requests my clients are making to you. The first is that I be kept advised of and receive copies of correspondence sent in the future from your office to individuals and entities concerned about this issue which would be in the alternative discoverable by the Freedom of Information Act. The second is that my clients and I be kept closely advised of and hopefully be permitted to provide what we think would be helpful and vital input and insight into any claims-filing procedure developed by the Board and the Bureau.

My clients are most interested in being part of the solution, and are not the least interested in being any part of the problem. We will consequently look forward to your positive response.

Sincerely,

JARDINE, FOREMAN & APPEL, P.C.

William H. Ostenson

William H. Ostenson
Of Counsel

c.c.: Mr. Don Thompson
Mr. Richard Price

Senator BRADLEY. Thank you very much. I might note he said that in New Jersey.

Senator Evans?

Senator EVANS. And they weren't listening in the capital which is too often the case.

You mentioned $100 an acre. That is really the maintenance and operation costs that the farmers will have to pay, or share of which the farmers will have to pay.

Mr. ROBINSON. Yes, I think so.

But there is also another problem there. With the dirt and silt that we have—and I noted that you mentioned the scheduling of having two years to do it. With the dirt and silt problem that we have now, I think the growers are going to be talking another $30, $40 an acre to repair the sprinkler system to keep going.

Senator EVANS. Just to patch it for the next two years.

Mr. ROBINSON. You are talking $130, $140 an acre in reality.

Mr. PRICE. Included in that is approximately $25 of the repayment portion of the contract.

Senator EVANS. Yes.

If it is 10,000 acres and the cost now seems to have escalated to $88 million, it probably would have been cheaper, if we had known all this at the beginning, just to buy everybody out. At $8,800 an acre you probably could have covered it pretty well.

Mr. PRICE. Many water users are advocating release from the district so they can go to their own system, either well or extracting it from the river.

Senator EVANS. What was the clarity or quality of the water delivered from the old system? I understand that in the latter days of the old system the difficulty was an extraordinary amount of water loss just from the leakage and other problems with the system, but what about the water itself?

Mr. PRICE. The miles and miles of gravity and flume and canal allowed the water to—because it was not pressurized, for the particulates to settle out as it was being delivered down through the system. This is very long, narrow system, about 20 miles. And so, the particulates was not a problem delivered in that fashion.

But the turbidity of the Similkameen River, which is one of the two major contributors to our water system, the Similkameen and the Okanogan, is terrible. It is known. It has been well-known forever. And if you read the definite plan report, I guess on reflection it appears that obviously the Bureau just missed the boat entirely in terms of its water quality samples and their reports in that regard.

Senator EVANS. It is my understanding—it probably would have been a better question to ask the Bureau. It is my understanding that early on, prior to the initial design, there were very few water quality samples really taken. There wasn't a whole lot of information on water quality. Is that your understanding?

Mr. PRICE. I'm not sure we had the extent of their development of that area.

Senator EVANS. Do you have any feel, Mr. Robinson, about what length of time—you know, if you could just kind of release the flood gates and say proceed ahead, design this darn thing, get it done, get it completed, what kind of a construction project are we

talking about? How long should it take? Do you have any feel for that to get the job done?

Mr. ROBINSON. Well, it is pretty hard for me to know how long it is going to take the Bureau to design something. I thought this project had dragged on far too long already. As far as I am concerned, I would have thought two years to get this project would have been very adequate to make this completion, designing the one pump, the Bonaparte plant for next year and also the following year completing the other, assuming that those things they do in the Bonaparte plant all work.

Senator EVANS. But I get the impression that you won't have—from the earlier questioning of the Bureau, it sounds to me like you won't have water in Bonaparte for either next year or the year after, and that you won't have any water to the other systems until a year later than that.

Mr. ROBINSON. I believe they said 1989 for Bonaparte.

Senator EVANS. Yes, but the Fiscal Year 1989 does not end till the end of September, which is a little late for the growing season of 1989.

Mr. ROBINSON. They had indicated that they would have it ready for the growing season of 1989.

Senator EVANS. I did not get that impression from the earlier testimony.

Mr. ROBINSON. I think in the written documents that they have sent us and in our correspondence it was 1989 I believe.

Mr. PRICE. But I believe, Senator Evans, you are correct that today they may have revised that. They have had difficulty pinning down their planning in the recent months.

Senator EVANS. Perhaps either I did not ask the question clearly enough or I didn't understand the answer, but the question I asked was designed to find out whether or not there would be water available for the beginning of the growing season when you need to irrigate. When does irrigation start for most of the farms?

Mr. ROBINSON. Usually about April 1.

Senator EVANS. Yes, it's about April 1. So, really in terms of fiscal years, we would have Fiscal Year 1988 and the first less than about six months of Fiscal Year 1989 by which the project would have to be done, tested and ready to deliver water. And I did not get the impression that they could do it that fast. I hope I am wrong.

Mr. ROBINSON. The reason I feel pretty sure that they will do it, if they don't do it before April 1, they cannot do it again to the next fall or winter because they can't do it during the irrigation season.

Senator EVANS. Well, that was the next question. Once you are stuck with an irrigation system, you have got to go with what you have. You cannot interrupt the water flow.

Is it also true that if they didn't do it for another year after that, that it would be unlikely that any representative of the Bureau of Reclamation could come into the valley?

Mr. ROBINSON. I would say so. It is getting difficult at this point.

Senator EVANS. Well, I think the people up there have been extraordinarily patient. This is a project first—I was just looking at the records here—first passed by this Congress authorizing it in

September of 1976. And 11 years later we do not have water and won't have for another couple of years.

Mr. ROBINSON. Well, as Richard indicated, our board meetings have begun to grow and grow, and people are pretty restless. And it is very hard to keep everybody in line and say, hey, we are going to get this thing done. Of course, this is what we want. It is the only solution to the problem really.

Senator EVANS. Yes.

Mr. ROBINSON. And hopefully you can help us to push that through and see that it gets done.

Senator EVANS. We won't charge you anything for helping to develop community spirit.

But Mr. Chairman, I just hope we can move as rapidly as possible on this bill so that we untie the hands of the Bureau of Reclamation so they feel they can move with dispatch on the completion of this.

Mr. ROBINSON. I think probably that another thing that would be important is that if it is not done in a fairly fast fashion, you are going to wear out a lot of other components within this system. And then the costs are going to escalate higher even. I think it needs to be attacked as quickly as possible.

Senator EVANS. We do appreciate—I know I speak on behalf of the Chairman and myself. We appreciate your coming back and the message that you have brought us, and we will try to respond as rapidly as we can.

Thank you, Mr. Chairman.

Senator BRADLEY. Thank you very much, Senator Evans.

I would like to just ask two questions, if I could. Are you confident that the changes the Bureau would like to make will work?

Mr. ROBINSON. The concept of what they're doing I think will work. I am sure of that. And they are still working on some of the fine points of their design. But water can be settled out. Silt can be settled out of water. And I feel that that principle will work.

Now, the things we would like I think it would help us, as far as to sell the growers that we are going in the right direction, is cost figures on these, what it will cost us to operate.

Senator BRADLEY. Because you are going to ultimately pay for this, right?

Mr. ROBINSON. We are ultimately going to pay.

Senator BRADLEY. Ultimately, the higher the price of the project, the higher the cost of the water.

Senator EVANS. It's in the operating costs.

Mr. ROBINSON. It would be in the operating costs is the area that we are most concerned.

As I understand it, under the contract, and as I feel, they are obligated to complete this within the contract as it exists today.

Mr. PRICE. Within the repayment obligation that the water users have contracted for without an increase in that amount.

Senator BRADLEY. Pardon?

Mr. PRICE. Without an increase in the amount that the water users have contracted to pay for in the original contract.

Senator BRADLEY. Could you tell me how much more new acreage or production do you think might be brought on line if this change and this improvement is made?

Mr. ROBINSON. There won't be any more acreage.

Senator BRADLEY. No more.

Mr. ROBINSON. You have a 10,000 acre limitation.

Senator BRADLEY. So, all of that is already spoken for.

Mr. ROBINSON. Yes.

Senator BRADLEY. Okay. Well, let me thank you for your testimony and for your trip. And the committee I think benefited a great deal from your testimony. Thank you very much.

Mr. PRICE. Thank you.

Mr. ROBINSON. Thank you.

Senator BRADLEY. The committee will adjourn, and again the record will be open until August 14.

[Whereupon, at 3:30 p.m., the hearing was adjourned.]

[Subsequent to the hearing the subcommittee received the following:]

COLORADO WATER CONSERVATION BOARD,
DEPARTMENT OF NATURAL RESOURCES,
Denver, CO, August 13, 1987.

Hon. BILL BRADLEY,
Chairman, Water and Power Subcommittee, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR SENATOR BRADLEY: I am writing to express support for S. 1549, a bill concerning an increase in the authorized expenditure ceiling for the Bureau of Reclamation's Closed Basin Unit, San Luis Valley Project, Colorado. I would appreciate inclusion of this letter in the hearing record of your subcommittee on the bill.

The Closed Basin Unit, which was originally authorized in 1972 and is now over one-half completed, is of great importance not only to Colorado, but also to New Mexico and Texas. This is because the project will provide water toward Colorado's obligations to those states under the Rio Grande Compact.

The project has had the long standing support of this Board. Indeed, the Board is acquiring all lands and rights-of-way required for the project, including lands for fish and wildlife mitigation measures. We are also, through this Board and the Colorado Division of Wildlife, contributing financially to the fish and wildlife, and recreation, enhancement features of the project.

I respectfully urge favorable action by the subcommittee on this bill at the earliest date possible. This will enable the project's construction schedule to be met in a timely fashion, thus avoiding additional costs to the federal government due to construction delays.

Sincerely,

J. WILLIAM MCDONALD,
Director.

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